No. 98-830

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Supreme Court, U.S.
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IN THE
Supreme Court of the United States
OCTOBER TERM, 1998

AMOCO PRODUCTION COMPANY, on behalf of itself and the class it represents,*
Petitioners,

v.

SOUTHERN UTE INDIAN TRIBE,

and

BRUCE BABBITT, Secretary of the United States Department of Interior, *et al.*,
Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Tenth Circuit

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BRIEF FOR PETITIONERS

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QUESTION PRESENTED

Whether, in reserving to the United States "coal" in lands patented under the 1909 and 1910 Coal Lands Acts, 30 U.S.C. §§ 81, 83-85, while passing the surface land and all other minerals (including natural gas) to the patentee, Congress reserved only the solid rock fuel commonly known as "coal," but not natural gas in coal formations.

LIST OF PARTIES AND AFFILIATES

In addition to the parties listed in the caption, the following federal agencies and officials are also respondents: the Department of Interior, and its subordinate agencies Bureau of Indian Affairs; Bureau of Land Management; Minerals Management Service; Kevin Gover, Assistant Secretary, Indian Affairs; Thomas Fry, Acting Director of the Bureau of Land Management; and Thomas Kitsos, Acting Director of the Minerals Management Service.

The following were defendants below but not appellees: Tiffany Gas Company; MarkWest Energy Partners, Ltd.; McKenzie Methane Corporation; SG Interests II, Ltd.; Union Texas Petroleum Corporation; Conoco, Inc.; SG Interests I, Ltd.; BellSouth Corporation Health Care Trust; Pablo Operating Company; Patricia Penrose Schieffer, individually and as Successor Trustee of the Patricia Penrose Schieffer Testamentary Trust; J. Thomas Schieffer, individually and as attorney-in-fact for the Patricia Penrose Schieffer Testamentary Trust; Greta P. Layton Schutt, Mercantile-Safe Deposit & Trust Company, Charles T. Peters, Jacques T. Schlenger, individually and as Co-Trustees of the Donaldson Brown Trust of March 25, 1965; Palo Petroleum, Inc.; and Meridian Oil Inc.

The following were defendants-appellees but are not petitioners: Anthony F. Zarlengo and Emerald San Juan Company, L.P.

Pursuant to Rule 29.6 of the Rules of this Court, Amoco Production Company amends its previous statement and declares that its parent company is BP Amoco Company (whose parent is BP Amoco Corporation), and that it has no subsidiaries that are not wholly owned.

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BRIEF FOR PETITIONERS

OPINIONS BELOW

The panel opinion of the court of appeals is reported at 119 F.3d 816 (Pet. App. 52a-94a), and the opinion of the court of appeals *en banc* modifying the panel opinion in part is reported at 151 F.3d 1251 (Pet. App. 1a-51a). The opinion and order of the district court awarding summary judgment to petitioners is reported at 874 F. Supp. 1142 (Pet. App. 95a-132a).

JURISDICTION

The judgment of the court of appeals *en banc* was entered on July 20, 1998. This Court granted an extension of time within which to file the petition for certiorari to and including November 18, 1998. The petition for certiorari was filed on that date. Certiorari was granted on January 22, 1999. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

STATUTES INVOLVED

The statutes involved in this case are 30 U.S.C. §§ 81 & 83-85 (Pet. App. 133a-136a).

STATEMENT OF THE CASE

In the Coal Lands Acts of 1909 and 1910 ("1909 and 1910 Acts"), 30 U.S.C. §§ 81 & 83-85, Congress reserved "coal" to the United States in any lands patented thereunder, while passing the surface land and all other minerals (including natural gas) to the patentee. Pursuant to a 1938 transfer from the United States, respondent the Southern Ute Indian Tribe ("Tribe") has equitable title to coal that the United States had reserved under the 1909 and 1910 Acts in lands within the Tribe's reservation boundaries.

In 1991, the Tribe filed suit in the United States District Court for the District of Colorado, claiming that the statutory reservation of "coal" included natural gas found in coal formations. The district court awarded summary judgment to the defendants, ruling that the 1909 and 1910 Acts reserved only the solid rock fuel commonly known as "coal," and not natural gas found in coal formations. A divided court of appeals *en banc* reversed, concluding that the word "coal" in the 1909 and 1910 Acts was ambiguous. Accordingly, the court held that by reserving "coal" Congress also reserved natural gas in coalbeds (but perhaps not the gas that has migrated from coalbeds to adjacent rock strata). Pet. App. 33a & 18a n.8. In this Court, petitioners challenge the court of appeals' contorted interpretation that conflicts with the plain language, history, and purpose of the 1909 and 1910 Acts.

Historical Background. This case has its roots in the settlement of the West and in Congress' efforts at the turn of the century to husband coal to fuel the country's change from an agrarian to an industrial economy. In the second half of the nineteenth century, Congress sought to develop the vast territory west of the Missouri River that maps of the time "forbiddingly referred to as the 'Great American Desert.'" *Leo Sheep Co.* v. *United States*, 440 U.S. 668, 670 (1979). Accordingly, Congress instituted sweeping changes in the administration of public lands. Among other land grants, the federal government granted public lands to those who would build railroads, roads, and canals that would link the West to the East, *id.* at 671-77, and provided free land in fee simple absolute for homesteaders. See, *e.g.*, Homestead Act, ch. 75, 12 Stat. 392 (1862). However, if the Department of Interior classified land as mineral land (*i.e.*, valuable for certain minerals), it "could not be disposed of under the major land-grant statutes," including the homestead laws. *Watt* v. *Western Nuclear, Inc.*, 462 U.S. 36, 47 & n.8 (1983). Lands classified as valuable for coal were considered mineral

lands. *United States* v. *Sweet*, 245 U.S. 563, 566, 572 (1918).

Even though initially it completely exempted mineral lands from the land grant statutes, Congress took steps in the latter half of the nineteenth century to promote their development by abandoning the existing practice of excluding mineral lands from public sale. See *Deffeback* v. *Hawke*, 115 U.S. 392, 401 (1885); Robert W. Swenson, *Legal Aspects of Mineral Resources Exploitation, in* Paul W. Gates, *History of Public Land Development* 699, 706-07 (reprint ed. 1987). In this process, coal was always treated differently from other minerals. *Id.* at 724 & n.181; see also *Western Nuclear*, 462 U.S. at 44 n.5. In 1864 and again in 1873, Congress enacted Coal Lands Acts specifically authorizing private entry onto lands classified by Interior as valuable for coal; those statutes set a maximum limit of 160 acres on individual entry and minimum prices of $10 to $20 per acre. See Act of July 1, 1864, ch. 205, § 1, 13 Stat. 343; Act of March 3, 1873, ch. 279, § 1, 17 Stat. 607. Congress enacted the Mining Law of 1872 to deal with other minerals; that statute authorized the sale of public lands in fee simple to mining claimants at rates of $2.50 to $5.00 per acre. See 30 U.S.C. §§ 26, 29, 30, 37. Oil and gas lands were always disposed of under the Mining Law. *Union Oil Co.* v. *Smith*, 249 U.S. 337, 345-46 (1919). But, regardless of whether land was conveyed under the homestead, coal land, or mining laws, the entryman received fee-simple title to the land, with no reservation of any part of the mineral estate to the United States. See *Western Nuclear*, 462 U.S. at 48-51; *Deffeback*, 115 U.S. at 406.

As reflected in the price of coal lands, coal powered the Industrial Revolution. See Daniel Yergin, *The Prize* 543 (1992) (describing the reign of "King Coal"). At the turn of the twentieth century, however, a "coal famine" struck the West, and concerns arose about the price, supply, and control of the country's primary source of energy. See *Hearings on Coal Lands and Coal-Land Laws of the United States Before the House Comm. on Pub. Lands,*

59th Cong. 11-13 (1907) (testimony of Edgar E. Clark, Interstate Commerce Commissioner) ("*Clark Testimony*"). At the same time, widespread fraud in coal-land administration was uncovered. The Department of Interior had relied largely on affidavits of entrymen as to the mineral or nonmineral character of lands. *Western Nuclear*, 462 U.S. at 48 & n.9; *Clark Testimony*, at 1-3, 17. Unwilling to pay the steep prices for coal lands set in the 1873 Act or abide by the Act's acreage limitations, railroads and other coal interests connived to have individuals falsify affidavits, acquire lands for homesteading, and then turn the land over to the railroads. Carl J. Mayer & George A. Riley, *Public Domain, Private Dominion* 117 (1985). Most of the coal lands that passed into private hands between 1873 and 1906 were not properly patented under the 1873 Coal Lands Act. *Id.; Clark Testimony*, at 6. President Roosevelt responded in 1906 by withdrawing from disposition under the public land laws 64 million acres of land "which the Geological Survey has indicated as containing, or in all probability containing, coal." 41 Cong. Rec. 2615 (1907); *Western Nuclear*, 462 U.S. at 48-49; Swenson, *supra*, at 726-27.

The Coal Lands Acts of 1909 and 1910. Roosevelt's order prompted an outcry from western interests concerned about its impact on settlers. See Swenson, *supra*, at 726-27. It was claimed that large tracts of land had been withdrawn even though the likelihood that they contained actual workable coal was slight. 43 Cong. Rec. 2503 (1909) (statement of Rep. Mondell); *id.* at 2505 (statement of Rep. Marshall). Large numbers of patent entries on suspected coal lands had been suspended. *Id.* at 2503 (statement of Rep. Mondell). Moreover, even homestead entrymen who had entered the land in good faith were forced to prove to the land office that the land was not valuable for coal, and such hearings could cost the entryman as much as $500. *Id.*; H.R. Rep. 60-2019, at 4 (1909). If it were determined after the hearing that the land was in fact valuable for coal, even the good-faith entryman would lose his land and his improvements upon

it. 43 Cong. Rec. 2503 (1909) (statement of Rep. Mondell).

For three years after Roosevelt's order, Congress struggled to reconcile the competing interests of protecting settlers and retaining federal control of coal. Some proposed severing the surface and mineral estates. Roosevelt was a proponent of this course, and he "urged Congress that '[r]ights to the surface of the public land . . . be separated from rights to forests upon and to minerals beneath it, and these should be subject to separate disposal.'" *Western Nuclear*, 462 U.S. at 49 (quoting Special Message to Congress, Jan. 22, 1909, 15 Messages and Papers of the Presidents 7266) (alterations in original). Indeed, a number of bills were introduced (but failed) that would have severed the surface and mineral estates, some of which specifically would have reserved "natural gas" as well as "coal" to the United States.[1]

Compromise was finally struck on the last day of Roosevelt's presidency in the Coal Lands Act of 1909, Act of March 3, 1909, ch. 270, 35 Stat. 844 (codified at 30 U.S.C. § 81) ("1909 Act"). The 1909 Act authorized the issuance of patents to "[a]ny person who has in good faith located, selected, or entered under the nonmineral land laws of the United States any lands which subsequently are classified, claimed, or reported as being valuable for coal," upon proof of compliance with those land laws. 30 U.S.C. § 81. The Act, however, mandated that the patent "shall contain a reservation to the United States of all *coal* in said lands, and the right to prospect for, mine, and remove the same." *Id.* (emphasis added). The Act preserved the right of the patentee to "mine coal for use

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[1] *See* 41 Cong. Rec. 630 (1907) (bill by Rep. Volstead "reserving coal, lignite, petroleum, and natural-gas deposits from disposal . . . under existing land laws"); *id.* at 1483-84 (bill by Sen. LaFollette "reserving from entry and sale the mineral rights to coal and other materials mined for fuel, oil, gas, or asphalt" while providing for sale of the surface lands); *id.* at 1788 (bill by Sen. Nelson "to provide for the reservation of the coal, lignite, oil, and natural gas in the public lands").

on the land for domestic purposes prior to the disposal by the United States of the coal deposit." *Id.*

In debate over the 1909 Act, Representative Mondell of Wyoming, chairman of the House Public Lands Committee, explained that the Act "is the first legislation before Congress providing for a limited patent, or a patent reserving the mineral. It is necessary in the opinion of our committee by reason of the conditions that exist." 43 Cong. Rec. 2504 (1909). The Committee had discussed at length whether to reserve other minerals, Rep. Mondell acknowledged, but it determined that the limited reservation of coal "is quite a sufficient departure from the past practice of the Government" and "as far as we will go in th[e] direction" of issuing limited patents. *Id.*

Although the 1909 Act addressed the rights of persons who had entered coal lands in the past, Congress remained concerned that the prohibitive price of coal lands deterred new settlement. See 45 Cong. Rec. 6042 (1910) (statement of Rep. Mondell). Congress passed in 1910 a parallel Act that authorized patents for new entrymen under nonmineral land laws, and contained an identical reservation of coal to the United States. Act of June 22, 1910, ch. 318, 36 Stat. 583 (codified by section at 30 U.S.C. §§ 83-85) ("1910 Act"). Congress again rejected calls to broaden the reservation to other minerals, including gas.[2] Thus, the 1909 and 1910 Acts reserved only coal to the United States, and then only on those lands classified by the federal government as valuable for coal.

Natural Gas at Issue in this Case. Even though Congress declined to reserve natural gas in the 1909 and 1910 Acts, thus allowing the entire natural gas estate to pass to the patentee, the issue in this case is whether its reservation of "coal" somehow encompasses natural gas found in coalbeds. The meaning of the reservation must be resolved on the basis of the ordinary understanding of

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[2] H.R. Rep. No. 61-377, at 5 (1910) (letter from Secretary of Interior Ballinger); 45 Cong. Rec. 6044 (1910) (statement of Rep. Stephens).

the term "coal" in 1909, see *infra* at 21-22, but nonetheless it may be helpful for the Court to understand basic facts about the minerals at issue. What those facts reveal is that gas that happens to be in a coalbed is no different from any other kind of natural gas.

A. *Coal*

"*Coal* is a readily combustible rock containing more than 50% by weight, and more than 70% by volume, of organic material formed from the compaction or induration of variously altered plant remains." John M. Hunt, *Petroleum Geochemistry & Geology* 124 (2d ed. 1996); American Geological Inst., *Dictionary of Geological Terms* 94 (Robert L. Bates & Julia A. Jackson eds., 3d ed. 1984) (same). See also Jack A. Simon & M.E. Hopkins, *Geology of Coal, in Elements of Practical Coal Mining* 14, 14 (Douglas F. Crickmer & David A. Zeeger eds., 2d ed. 1981) ("Coal is defined as a combustible rock that originated in the accumulation and physical and chemical alteration of vegetation"); Otto Stutzer, *Geology of Coal* 1 (Adolph C. Noé trans., Univ. of Chicago Press 1940) ("Coal is a combustible rock which had its origin in the accumulation and partial decomposition of vegetation") (emphasis omitted).

"In the same way as inorganic rocks are composed of minerals, . . . coal consists of macerals," which are the organic microscopic constituents of coal. E. Stach *et al.*, *Stach's Textbook of Coal Petrology* 87 (3d ed. 1982). Because of the many different factors affecting the origin and formation of a coal seam, however, a coal maceral "varies widely in its chemical composition and physical properties and is not crystalline." *Id.*; see also D. W. Van Krevelen, *Coal* 193 (3d ed. 1993) ("coal is an organic rock, made up of petrographically-homogenous components (macerals) each of which must have formed from an already complex parent material by a complicated chemical reaction process").

Coal is generally formed from massive deposits of terrestrial plant matter in coastal swamp areas, which become buried by sediments as the sea level rises or the land subsides. Stach, *supra*, at 5, 16-17; Simon & Hopkins, *supra*, at 18-20. Bacterial action converts the plant matter into peat. As the peat is buried under more sedimentary layers, it is compacted and is increasingly subject to high temperature and pressure. This process yields coals of increasing carbon content. The four major "ranks" of coals produced in this process are, in order of production and increasing carbon content: lignite (soft brown coal), subbituminous (hard brown coal), bituminous, and anthracite. B.P. Tissot & D.H. Welte, *Petroleum Formation & Occurrence* 234-35 (2d ed. 1984); Stach, *supra*, at 38-43.

The process of producing these coals is known as "coalification," but there is nothing unique about it. Stach, *supra*, at 43. It is the same process of burial, compaction, and geothermal heating of organic matter that occurs in the development of any of the many kinds of carbonaceous materials. Tissot & Welte, *supra*, at 229; Hunt, *supra*, at 208. In chemical terms, organic matter of relatively unstable structure with a high ratio of hydrogen to carbon ("H/C ratio") is transformed into a condensed, stable compound of high carbon content. Hunt, *supra*, at 206-09. This decrease in the H/C ratio is typical of all organic matter (not just coal) as it exposed to increasing temperature over time. *Id.* at 209; Tissot & Welte, *supra*, at 241. As discussed in more detail below, gas is a byproduct of this transformation of organic matter into more stable arrangements; the hydrogen atoms that are released form separate gas molecules, including methane (which is four hydrogen atoms bonded to a single carbon, CH_4). Hunt, *supra*, at 209.

B. *Natural Gas*

Natural gas is the gaseous form of petroleum, *i.e.*, petroleum that does not condense at standard atmospheric temperature and pressure conditions. Hunt, *supra*,

at 23.[3] Natural gas is composed principally of the hydrocarbon gas methane, but (depending on its source and the conditions of its formation and accumulation) may contain varying amounts of other gases. Tissot & Welte, *supra*, at 199. The major forms of petroleum other than natural gas are "*condensate*, which is gaseous in the ground, but condenses at the surface, and *crude oil*, the liquid part of petroleum." Hunt, *supra*, at 23. Coal is not a form of petroleum, but is rather a distinct fossil fuel. S. I. Tomkeieff, *Coals and Bitumens* 9-10 (1954).

Natural gas is, like coal itself, formed from the chemical breakdown of ancient organic matter as it is exposed to microorganisms and high temperatures during its progressively deeper burial under the earth's surface. Tissot & Welte, *supra*, at 71-79, 201-18. There are four major sources of natural gas: "(1) methanogenic bacteria, (2) all types of kerogens, (3) coal, and (4) oil in source and reservoir rocks." Hunt, *supra*, at 186.[4]

Methanogenic bacteria act in the first phase of gas formation. Organic matter is deposited in aquatic environments, and is decomposed by microorganisms in water and in shallow sands and muds. Tissot & Welte, *supra*, at 69-71. Methane is the principal hydrocarbon released during decomposition, but much of it dissipates into the environment, and bacterial methane represents only a small part of natural gas reserves today. *Id.* at 201-04; Hunt, *supra*, at 187-88. As the organic carbon residue from this process is buried by new layers of sediment,

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[3] Petroleum "is a form of bitumen composed principally of hydrocarbons and existing in the natural gaseous or liquid state in its natural reservoir," but "[i]n common usage, it has come to mean any hydrocarbon mixture that can be produced through a drill pipe." Hunt, *supra*, at 23. The term "bitumen" refers generally to organic matter in sedimentary rocks that is soluble. Tissot & Welte, *supra*, at 131-32; Hunt, *supra*, at 634. A "hydrocarbon" is a compound consisting only of hydrogen and carbon. *Id.* at 637.

[4] Kerogen is insoluble organic matter (animal and plant) in sedimentary rocks. Tissot & Welte, *supra*, at 131. Kerogen is the most abundant and important form of organic carbon, and is the source of most oil and gas. *Id.*; Hunt, *supra*, at 126-28.

it becomes condensed into kerogen, or (under certain circumstances where the deposition of plant matter was massive) into coal. Tissot & Welte, *supra*, at 70. As temperature and pressure increase with further burial, the existing kerogen or coal is no longer in equilibrium with its environment and breaks down into more stable chemical arrangements. *Id.* at 160. Methane is released as the carbon bonds in kerogen or coal (or in the oil liberated from kerogen and coal) crack apart. *Id.* at 204-06; Hunt, *supra*, at 186. Thus, methane and other components of natural gas are byproducts of the geothermal breakdown of kerogen and coal.

Natural gas is migratory. Driven by subsurface pressure and water flow, natural gas sometimes travels from its source rock, and accumulates in what are known as "reservoir rocks," which are permeable and porous rock formations (*e.g.*, sandstone) with a natural seal that prevents the gas from escaping. Tissot & Welte, *supra*, 293-95, 341. Gas exists in reservoirs in three states: as "free gas" trapped in rock fractures; dissolved in water; and in a state of "adsorption," where the gas under conditions of high subsurface pressure adheres to the surface of the rock pores. Affidavit and Report of Douglas M. Smith, Joint Appendix ("J.A.") Vol. 1, at 239-40, 249-50.[5]

The accumulation of natural gas in large quantities in reservoirs allows for commercial development, and the gas is tapped by drilling wells into the reservoir. Because gas flows in the direction of lower pressure and concentration, it will flow through the well bore, where it is captured for treatment and transport. Affidavit and Report of Matthew J. Mavor, J.A. Vol. 1, at 203-05.

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[5] Physical adsorption (the kind that occurs in gas reservoirs) is a universal phenomenon whenever a gas and a solid surface are present together, as the gas is attracted to the surface by weak intermolecular forces known as van der Waals forces. Smith, *supra*, J.A. Vol. 1, at 234-36, 240-42; Affidavit and Report of Dan Yee, J.A. Vol. 1, at 263-64.

As the foregoing indicates, "[t]he general scheme of hydrocarbon generation from coal parallels that from kerogen in petroleum source rocks." Tissot & Welte, *supra*, at 250. It is hardly surprising that the generation of natural gas is the same from coal as from other source rocks; coal is formed out of the same plant debris as certain types of kerogen, the difference being that coal occurs where the deposit of debris is massive and confined rather than dispersed. *Id.* at 157; Hunt, *supra*, at 637-38 (definition of "kerogen"). As is true whenever natural gas originates from any source rock, the gas is no longer part of the chemical structure of the coal that is its source; rather, it is "liberated" from the coal. Tissot & Welte, *supra*, at 245-46; see Stach, *supra*, at 43 (describing "the substantial losses of methane" as coal passes through the early bituminous stages); *id.* at 402 ("in the different coalification stages . . . varying amounts of methane are released from the coal").[6]

Because coalification yields a coal rock that is permeable and porous, the coal also acts as a reservoir for gas. See James E. Fassett, *Coal-Bed Methane—A Contumacious, Free-Spirited Bride; The Geologic Handmaiden of Coal Beds, in Energy Frontiers in the Rockies* 131, 132 (John C. Lorenz et al. eds., 1989). Coal is not unique in this respect; carbonaceous shales, for example, also are both the source and the reservoir of natural gas.[7] Even so, coalification generates far more methane than can be stored in the coal itself; indeed, most of the methane generated (up to 95% for some coals) escapes from the coalbed, and is often trapped in other reservoir rock. Stach, *supra*, at 402; Tissot & Welte, *supra*, at 248.

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[6] Moreover, when gas is generated from coal, not all of the gas comes directly from the coal itself; "by the semianthracite stage, one-third of the gas has come directly from coal and two-thirds from the cracking of the oil generated by coal . . . ." Hunt, *supra*, at 211.

[7] *See* Robert C. Milici, *Autogenic Gas (Self Sourced) From Shales —An Example From the Appalachian Basin, in The Future of Energy Gases* 253, 256 (U.S.G.S. Prof. Paper 1570, David G. Howell ed., 1993).

The gas that is stored in the coal formation is referred to in the trade as "coalbed gas" or "coalbed methane" (CBM). This latter term is a misnomer, for (like any natural gas) coalbed gas is a mixture of methane principally and small amounts of other gases. See Fassett, *supra,* at 132; Smith, *supra,* J.A. Vol. 1, at 239-40. It is, of course, the same gas as the coal-generated gas that has traveled to an adjacent rock stratum.

There is nothing unique in the way gas exists in coal reservoirs, as the Department of the Interior has formally recognized. *Rights to Coalbed Methane Under an Oil & Gas Lease for Lands in the Jicarilla Apache Reservation,* 98 Interior Dec. 59 (1990) (Pet. App. 165a). Gas exists in coal formations in the same three states as it exists in any reservoir: free gas, dissolved in water, and "adsorbed" to the pores of the rock. Smith, *supra,* J.A. Vol. 1, at 239-40, 249-50. In general, a much greater percentage of gas in coal is in the adsorbed state than in "conventional" reservoirs (such as limestone or sandstone), largely because of high surface volume created by the small size of the pores in the coal rock. *Id.* at 240-41.[8] The basic mechanism of gas storage is, however, precisely the same. *Id.* at 234-36.

Moreover, natural gas formed from other sources may migrate into and be trapped in the coal reservoir. Mavor, *supra,* J.A. Vol. 1, at 194-95. Indeed, a recent study published after this litigation commenced found that, contrary to earlier assumptions, up to 60% of the gas in the Fruitland Coal Formation at issue in this case actually migrated *into* the coal seam. Andrew R. Scott et al., *Thermogenic and Secondary Biogenic Gases, San Juan Basin, Colorado and New Mexico—Implications for Coalbed Gas Producibility,* 78 AAPG Bulletin 1186, 1206 (1994).

In short, as has been known for centuries, the gas in coal formations is simply natural gas. It is formed in the

[8] Other reservoirs (such as Devonian shales) with comparable properties also have large volumes of natural gas stored by adsorption. Mavor, *supra,* at 4 (J.A. Vol. 1., at 197).

same manner as any other natural gas, and the mechanisms of its storage and flow in the reservoir are the same. Coalbed gas is produced using standard drilling, completion, and pumping equipment and techniques. It is gathered and treated in gas plants like any natural gas; commingled and transported in pipelines with gas from other geologic formations; and used by consumers for the same purposes in exactly the same fashion as all other natural gas. Mavor, *supra,* J.A. Vol. 1, at 185-86.

The 1981 Solicitor's Opinion on Coalbed Gas Rights in Federal Lands. In the 1970s, scientists came to recognize coalbed gas, long known as a hazard and waste product of coal mining, as a potentially significant commercial resource. See, *e.g.,* M. Deul & A. Kim, *Coalbed Gas: A Source of Natural Gas,* Oil & Gas J., June 16, 1975, at 47. In the aftermath of the Arab oil embargo of that decade, the federal government began broadly to promote all new kinds of gas production actively through grants, see, *e.g.,* 42 U.S.C. §§ 5901-5915, and substantial tax credits, see 26 U.S.C. § 29.

Because extensive coalbed gas reserves are found in the millions of acres of land covered by the 1909 and 1910 Acts, the question of title to coalbed gas came before the Department of Interior in its capacity as the agency that administers the 1909 and 1910 Acts. "In order to expedite the development of this energy source," *Ownership of & Right to Extract Coalbed Gas in Federal Coal Deposits,* 88 Interior Dec. 538, 539 (1981) (Pet. App. 142a), the Solicitor of Interior in 1981 issued an opinion binding on all Department of Interior offices and officials that the reservation of "coal" to the United States in the 1909 and 1910 Acts did not include coalbed gas. Pet. App. 140a; Pet. App. 180a.

Drawing on Departmental expertise in mineral resources, the Solicitor first determined that "[c]oalbed methane is both scientifically defined and legally regarded as a gas," and that coal and CBM "are distinct, and are potentially severable." Pet. App. 143a-144a (footnotes omitted). Carefully examining the legislative history re-

counted above, the Solicitor determined that "[t]he statutory language and the legislative history belie the argument that Congress intended to reserve any mineral other than coal in the 1909 and 1910 Acts." Pet. App. 147a. Subsequent statutes confirmed the narrowness of the reservation, among them the Act of July 17, 1914, ch. 142, 38 Stat. 509 (codified as amended at 30 U.S.C. §§ 121-123) ("1914 Act"), that separately reserved "gas" to the United States on lands classified as valuable for that mineral,[9] and legislation in 1933 and 1955 that treated coal and other reserved minerals as distinct from the unreserved minerals they host. Pet. App. 147a-149a. Finally, the Secretary found that under the Mineral Leasing Act, coalbed gas fit the definition of "gas" in Department of Interior regulations. Pet. App. 152a-159a. In reliance on the Solicitor's 1981 opinion, gas producers throughout the country entered into leases with the owners of the gas estate, expending billions of dollars in capital investments, and a boom in coalbed gas production ensued. See Petition 24-25.[10]

This Litigation. The Tribe abandoned its original lands in the nineteenth century and relocated to a reservation in Colorado along with other Ute tribes. After the infamous "Meeker Massacre" of settlers by members of a different Ute tribe, Congress in 1880 extinguished all tribal ownership of reservation lands, resettled the Tribe to unoccupied lands along the La Plata River, allotted lands to individual Indians, and provided for the remainder to be ceded back to the United States. See *United*

[9] The Solicitor expressly determined that coalbed gas was reserved as "gas" in lands patented under the 1914 Act that were classified as valuable for gas. Pet. App. 151a-152a.

[10] In a one-sentence retraction memorandum, the current Solicitor of the Interior withdrew this opinion on the day the federal respondents' brief in opposition to the petition for certiorari was due. *See* Br. in Opposition of Federal Resp'ts App. 1a. After granting certiorari, this Court modified the question presented to eliminate consideration of whether the 1981 Solicitor's opinion was entitled to deference under *Chevron U.S.A. Inc.* v. *Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984). Order of January 29, 1999.

States v. *Southern Ute Tribe*, 402 U.S. 159, 161-64 (1971). Many of those ceded, non-allotted lands were patented to settlers under various public land laws, subject after the 1909 and 1910 Acts to a reservation of coal to the United States where lands were classified as valuable for that mineral. In 1938, pursuant to a statute that authorized restoration of tribal ownership of reservation lands (without impairment of any existing rights to the land), the Department of Interior conveyed equitable title to the Tribe in approximately 450,000 acres where no homestead had been established, and in 200,000 acres of coal that had been reserved to the United States under the 1909 and 1910 Acts. As a result of these transfers, "the Tribe's reservation is a checkerboard" of Indian and non-Indian lands. Pet. App. 109a-110a. A tract in which the Tribe owns the surface and all minerals often is adjacent to another in which the Tribe owns only the coal because the surface and other minerals have been patented to settlers. See Br. of *Amicus Curiae* La Plata County in Support of Petition for Certiorari (attached map).

The Southern Ute reservation is located within the San Juan Basin, which is the leading CBM-producing basin in the West. In reliance on the 1981 Solicitor's opinion, oil and gas companies entered into leases to produce coalbed gas with individual landowners holding title under 1909 and 1910 Act patents to the more than 200,000 acres where the Tribe owned only the coal. For tribal lands, the Tribe issued oil and gas leases to the same producers for coalbed gas production. The Tribe pooled its lands with non-Indian fee lands in communitization agreements and granted rights of way across tribal lands and roads, sharing royalties for the coalbed gas with the fee owners.

Its conduct notwithstanding, in 1991 the Tribe brought this action against petitioners, who are royalty owners and producers under oil and gas leases covering the 200,000 acres where the Tribe owns the coal (but not oil and gas), as well as against various federal agencies and officials responsible for land held in trust for the Tribe. The

Tribe sought "a declaration that it owns the beneficial interest in the coal, including all substances located in the coalbeds and coal strata," such as "coalbed methane, water, [and] carbon dioxide." First Amended Complaint ¶ 1 (J.A. Vol. 1, at 163). The Tribe alleged that Congress' reservation of "coal" to the United States in lands patented under the 1909 and 1910 Acts encompassed these substances, and therefore it owns them pursuant to the transfer of federal interests in coal to the Tribe in 1938. *Id.* ¶¶ 10-15 (J.A. Vol. 1, at 167-78). Besides the declaration of ownership, the Tribe sought a quiet-title order, injunctive relief, and an award of damages against petitioners for trespass, conversion, conspiracy to deprive them of property under color of state law, and unpaid tribal taxes and penalties. *Id.* Prayer for Relief (J.A. Vol. 1, at 179-82).

In 1992, the district court certified a class of non-federal defendants (naming Amoco Production Company ("Amoco") as class representative), and in 1994 it awarded summary judgment to the class and the federal defendants [11] on the basis of its interpretation of the plain meaning of the term "coal" in the 1909 and 1910 Acts. Pet. App. 99a. The district court reviewed dictionaries from the early Twentieth Century that uniformly defined coal as a solid, but held that in any event "common sense dictates that in 1909 and 1910, Congress intended 'coal' to mean the solid rock substance." Pet. App. 114a. Given that the Acts did not once mention "gas" or any "constituent" of coal, the district court stated that "it would require not merely some, but herculean ingenuity to create ambiguity in the 1909 and 1910 Acts." Pet. App. 115a.

Examining the legislative history, the district court concluded that Congress meant "to depart in the most narrow way possible from the historic practice of the United

[11] The class and the federal defendants had each filed motions for summary judgment in which they argued that the reservation of "coal" in the 1909 and 1910 Acts did not include coalbed gas.

States to grant fee simple absolute title to homesteaders," and reserved only the solid rock coal "to insure an adequate source of the nation's primary energy resource." Pet. App. 123a-124a. The district court also found significant that the 1914 Act separately reserved "gas" and other named minerals on lands valuable for those minerals, and that it was not until 1916 that Congress broadly reserved "all the coal and other minerals," 43 U.S.C. § 299, in a land-grant statute. Pet. App. 124a-127a. The district court held in the alternative that, even if ambiguity could be wrung from the term "coal," the 1981 Solicitor's opinion was entitled to *Chevron* deference. Pet. App. 128a-129a.

On appeal, the Tenth Circuit reversed. A panel of the court held that the term "coal" was ambiguous; that the 1981 Solicitor's opinion was not entitled to *Chevron* deference in resolving that ambiguity; and that the ambiguity should be resolved against the grantee so that no public land passed by implication. Pet. App. 52a-94a. The court granted rehearing *en banc* limited to the question of whether the term "coal" in the 1909 and 1910 Acts "unambiguously excludes or includes CBM." Pet. App. 8a. By a 6-3 decision, with four judges recused, the court *en banc* agreed with the panel that the 1909 and 1910 Acts were ambiguous, and adopted the panel opinion with modifications. Pet. App. 8a-11a.

The *en banc* court began its analysis, before it even addressed the text of the 1909 and 1910 Acts, with the admonition that "[o]f critical importance is the long recognized principle of statutory construction, applicable here, that ambiguity or uncertainty in the terms employed in land grants should be resolved in favor of the government." Pet. App. 10a-11a (quotation and brackets omitted). The court then summarily dispensed with an analysis of the statutory language, asserting that because "[the] Acts neither define coal nor mention CBM," therefore "the statutes do not by their plain language indicate congressional intent regarding CBM." Pet. App. 14a.

The court then undertook to divine "Congress' specific intent to include or exclude CBM in its reservation of coal." Pet. App. 14a. Relying on what it believed were ambiguous discussions of coal's chemical composition in contemporary texts, and on modern scientific findings that most CBM *in situ* is adsorbed to the surface of the coal, the court concluded that "CBM is not sufficiently like other natural gases for us to conclude that Congress in 1909 unambiguously intended the owners of other natural gases to also own CBM associated with the reserved coal." Pet. App. 18a-19a (footnotes omitted). Because CBM was regarded as a waste product that at the time could only be extracted by damaging the coal, the court doubted that Congress formed "a specific intent to convey CBM as a gas." Pet. App. 24a. The court found present-day exploitation of CBM by the coal owner to be consistent with Congress' "general intent" to reserve all coal that may have future economic value. Pet. App. 32a.

Having determined that the term "coal" in the 1909 and 1910 Acts "neither unambiguously includes or excludes coalbed methane," the court of appeals resorted to the rule that doubts respecting land grants are resolved in favor of the government, and held that the reservation of coal "includes the adsorbed CBM." Pet. App. 32a-33a. The court specifically declined to "address ownership of CBM that may have migrated away from the coal into adjacent non-coal strata." Pet. App. 18a n.8.

Judge Tacha, joined by Judges Anderson and Baldock, dissented from the *en banc* decision. Judge Tacha pointed out that "coal" was uniformly defined in dictionaries of the time as a solid rock fuel, and "[i]t is extremely unlikely . . . that a people as familiar with CBM gas as the people of 1909 would define coal as a 'solid' if they also thought of CBM gas as coal." Pet. App. 37a. Because CBM's status as a waste product made its ownership undesirable, "one would not expect the United States to reserve it," underscoring that Congress did no more than reserve the solid rock fuel known as coal. Pet. App. 39a. Judge Tacha faulted the majority for its "central interpretive error" of deducing that the failure of the statutes to define "coal" or mention CBM creates ambiguity as to whether Congress reserved CBM to the United States. "Silence does not equate with ambiguity." Pet. App. 39a-40a.

Judge Tacha further criticized the majority for inferring that Congress would have distinguished between the CBM remaining in the coalbed and the 90 percent of coalbed gas that migrates into adjacent rock. Pet. App. 40a-41a. She also dismissed the majority's claim that CBM's adsorption to the pores of the solid coal is of legal relevance. "Physical sorption occurs between gases of all types and solids," and involves the same pervasive forces of molecular attraction that bind paper to the table on which it sits. Pet. App. 43a. Finally, the majority's claim that CBM could not be extracted without damaging the coal, even if true, has no bearing on the issue of ownership. The law of split estates has always permitted the owner of other minerals to extract them so long as "he does not unreasonably damage the coal." Pet. App. 47a. The dissent concluded that coal has a plain and ordinary meaning in the 1909 and 1910 Acts that does not encompass coalbed gas. Pet. App. 50a-51a.

SUMMARY OF THE ARGUMENT

In interpreting statutes reserving minerals, this Court gives the minerals reserved their ordinary and popular meaning, on the premise that Congress deals with a practical subject in a practical way. In the 1909 and 1910 Acts, Congress reserved simply and exclusively "coal" and no other mineral. Coal, as popularly understood, is a solid combustible rock; it is not part gas. That was true in 1909, and it is true today. The 1909 and 1910 Acts by their plain terms reserve the solid rock coal to the United States, and pass the surface and all other minerals (including natural gas) to the patentee. Coalbed gas is natural gas, and therefore it belongs to the patentee.

Surrounding provisions in the statutes confirm the plain and limited meaning of the reservation. The patentee was entitled to use the reserved coal for "domestic purposes"; that is a clear reference to solid coal, because coalbed gas was never captured for residential use. Moreover, the reservation applies to lands that were classified as valuable for coal by the Department of Interior. Interior classified lands by the presence and value of solid coal, using "air-dried" (*i.e.*, gas-free) samples of solid coal. The presence *vel non* of coalbed gas played no part in the classification of lands as valuable for coal.

History explains why Congress limited the reservation as it did. Congress was faced with a crisis in the supply of *solid* coal, fraudulent misclassification of lands containing valuable *solid* coal, and the danger of monopolization of *solid* coal by railroad interests that had abused the homesteading laws. The initial response to that crisis —blanket withdrawal of lands from homestead entry and conveyance—unduly prejudiced the rights of settlers and inhibited settlement of the West. Congress sought to secure federal control of that mineral, but at the same time to minimize encroachment on the traditional rights of homesteaders. It considered and rejected bills and amendments that specifically would have reserved "gas" and other precious minerals to the United States, departing from the historic practice of granting fee-simple patents only to the extent necessary to meet the crisis at hand: namely, by reserving the specific mineral coal, and only on lands classified as valuable for that mineral.

Other minerals statutes underscore that Congress intended only to reserve the solid mineral coal in 1909 and 1910. When Congress decided to reserve gas, as it did four years later, it did just that: it reserved "gas," and only in lands deemed valuable for gas, not for solid coal. Moreover, the 1909, 1910, and 1914 Acts must be construed *in pari materia* with the Mineral Leasing Act of 1920, which provides for the disposition of reserved minerals. The provisions of that Act, and the Department of Interior's authoritative implementing regulations, confirm

that coalbed gas is "gas" reserved under the 1914 Act and not "coal" reserved under the 1909 and 1910 Acts.

The Tenth Circuit rejected this straightforward construction of the Coal Lands Acts. Placing the burden on petitioners to dispel ambiguity in the statutes, it ruled that the Acts had no plain meaning because they did not define the everyday term "coal." Despite this Court's admonition that mineral reservations are not construed according to scientific definitions, the Tenth Circuit ventured into an analysis of turn-of-the-century understandings of the chemistry of coal, finding ambiguity solely by misreading contemporary texts. Mistaking silence as to coalbed gas for ambiguity in the word "coal," the Court ruled that ambiguity should be construed in favor of the sovereign. The end result is an unprecedented split gas estate, where "adsorbed CBM" is reserved to the United States, but any gas that migrates from the coalbed to an adjoining layer of noncoal rock and all other natural gas belongs to the patentee. Even the federal respondents have elsewhere admitted this type of split estate would be unusually difficult to administer. Such an impractical construction, so contrary to the plain language and history of the Acts, should be rejected. The judgment below should be reversed.

ARGUMENT

I. THE PLAIN MEANING OF THE 1909 AND 1910 ACTS IS THAT THE SOLID ROCK FUEL "COAL" IS RESERVED TO THE UNITED STATES WHILE THE SURFACE AND ALL OTHER MINERALS (INCLUDING NATURAL GAS) PASS TO THE PATENTEE.

In statutory construction, "deference to the supremacy of the Legislature, as well as recognition that Congressmen typically vote on the language of a bill, generally requires [courts] to assume that the legislative purpose is expressed by the ordinary meaning of the words used." *United States* v. *Locke*, 471 U.S. 84, 95 (1985) (internal quotation marks omitted). Thus, "unless otherwise defined, words will be interpreted as taking their ordinary,

contemporary, common meaning . . . at the time Congress enacted the statute . . . ." *Perrin* v. *United States*, 444 U.S. 37, 42 (1979).

This Court has emphasized the special importance of the ordinary-meaning rule in construing statutory mineral reservations. In *Burke* v. *Southern Pac. R.R. Co.*, 234 U.S. 669 (1914), this Court confronted the question of whether a reservation of "mineral lands" included petroleum lands, and was "asked to give effect to the strictly scientific view that petroleum is a resultant of the decomposition of organic matter . . . and therefore is not a mineral." *Id.* at 679. The Court assumed that oil was not a mineral in the scientific sense, but held that a "strictly scientific" definition "is not the test contemplated by the statute." *Id.* Congress "was dealing with a practical subject in a practical way, and we think it used the words 'mineral lands,' and intended that they should be applied, in their ordinary and popular sense." *Id.*[12]

A. Coal Was Popularly Understood In 1909 To Refer To A Solid Combustible Rock, Not Gas.

Few terms would have been better understood in common parlance in 1909 than the word "coal," the solid rock fuel that was the country's primary energy resource at the turn of the century, used both in households and in commerce. See Sam H. Schurr et al., *Energy in the American Economy, 1850-1975*, at 61-64, 68-69 (1960). Although resort to dictionaries is hardly necessary for an everyday term like "coal," see Pet. App. 114a, dictionaries of the time can establish the plain meaning of undefined statutory terms. See *American Textile Mfrs. Inst., Inc.* v. *Donovan*, 452 U.S. 490, 508-09 (1981). Predictably, such dictionaries uniformly define coal as a solid combustible rock.

[12] *Burke*'s ordinary-meaning rule also serves the important principle in public land law of certainty of title. *Barden* v. *Northern Pac. R.R. Co.*, 154 U.S. 288, 326 (1894); *Deffeback*, 115 U.S. at 404. A patent issued under the 1909 and 1910 Acts was meant to declare in no uncertain terms to the homesteader what property was his (and could be alienated) and what belonged to the United States.

For example, one dictionary of the era defined coal as a "solid and more or less distinctly stratified mineral, . . . brittle, combustible, and used as fuel, not fusible without decomposition, and very insoluble." II *Century Dictionary and Cyclopedia* 1067 (1906-09). Coalbed gas is, of course, not a solid, even when adsorbed to the surface of the rock, and it is also soluble; it simply does not fit within the definition of coal. Other dictionaries give no suggestion that coal was understood as anything but a solid combustible rock. See, *e.g.*, *The Universal Encyclopaedic Dictionary* 945 (1905) (defining "coal" as "a stratified rock"); *American Dictionary of the English Language* 244 (1889) (coal is a "solid, combustible substance"); II *New English Dictionary On Historical Principles* 549 (1893) (coal is a "mineral, solid, hard, opaque").[13] That remains the modern dictionary definition of coal. Compare *Webster's New International Dictionary* 424 (1916) (coal is a "black, or brownish black, solid, combustible mineral substance formed by the partial decomposition of vegetable matter . . .") with *Webster's Third New International Dictionary* 432 (1986) (same).

Contemporary treatises on coal similarly identify it as a solid combustible rock, not as partly gas. One such turn-of-the century work defines it as "a solid stratified mineral substance, black or brown in color, and of such a nature that it can be economically burnt in furnaces or grates." See William A. Barr, *A Catechism on the Combustion of Coal and the Prevention of Smoke* 10 (1901). Marsh gas, by contrast, "occurs in the coal measures, where it is known as firedamp," just as it "occurs in marshy places" from the putrefaction of plant matter under water. *Id.* at 170. See also Marie C. Stopes & R. V. Wheeler, *Monograph on the Constitution of Coal* 2 (1918) ("Ordi-

[13] These dictionaries define "marsh gas," "methane," and "firedamp" as gases "given off by," "occur[ring] in," "evolved from," "contained in," "found in," or "accumulat[ing] in" coal measures, but not as a constituent part of the coal itself. *See, e.g.*, III *Century Dictionary and Cyclopedia*, at 2229; V *id.* at 3740; *Universal Encyclopaedic Dictionary* at 1837, 2637, 2696; IV *New English Dictionary* 243 (1901); VI *New English Dictionary* 188 (1908).

nary coal is a compact, stratified mass of 'mummified' plants . . ." (emphasis omitted)); F.R. Wadleigh, *Coal Manual for Salesmen, Buyers, and Users* 9 (1921) ("Coal . . . is a carbonaceous rock of complex and varying nature, its origin vegetable matter, altered by various geological and chemical processes to form coal as it exists today."); Elwood S. Moore, *Coal* 3 (1922) (coal "is as much a rock as are standstone and limestone"); Stutzer, *supra*, at 1. This remains the prevailing scientific definition of coal today. See *supra*, at 7 (citing modern definitions).

Its present stance in this litigation notwithstanding, the Department of Interior has long defined coal as "combustible carbonaceous rock, classified as anthracite, bituminous, subbituminous, or lignite." 30 C.F.R. § 700.5; see also *id.* § 206.251; 25 C.F.R. § 211.3 (coal included in definition of solid minerals); Leasing of Tribal Lands for Mineral Development, 61 Fed. Reg. 35,634, 35,639 (Jul. 8, 1996) ("Coal is . . . a solid"). Indeed, its own glossary of mining terms from 1920 offers the following definition of coal:

> A solid and more or less distinctly stratified carbonaceous substance varying in color from dark-brown to black, brittle, combustible, and used as a fuel; not fusible without decomposition and very insoluble.

Albert H. Fay, Department of Interior, *A Glossary of the Mining and Mineral Industry* 163 (Bureau of Mines Bulletin 95, 1920) ("*1920 Glossary*"); *accord* Department of Interior, *A Dictionary of Mining, Mineral, and Related Terms* 222 (1968) (same, except uses term "carbonaceous rock"); *Instructions*, 48 Pub. Lands Dec. 300, 301 (1921) (relying on this "generally accepted" 1920 definition in construing statutory term "coal" under the Mineral Leasing Act). The Department cannot argue that soluble coalbed gas meets its own longstanding definition of coal as an insoluble solid. Tellingly, the 1920 glossary defines "fire damp" as formed from the "decomposition of coal," and thus plainly not coal itself. *1920 Glossary* at 270.

This Court has also recognized the common-sense distinction between coal and gas in its decisions, stating that natural gas, a fugacious mineral, "differ[s] from solids in place such as coal." *Champlin Ref. Co.* v. *Corporation Comm'n*, 286 U.S. 210, 233 (1932); see also *United States* v. *Buffalo Natural Gas Fuel Co.*, 172 U.S. 339, 342 (1899) (relying on testimony that the statutory term "crude bitumen" encompassed many distinct substances, including those that are "gaseous, as natural gas or marsh gas" and those that are "solid, as . . . bituminous or anthracite coal"). Coal is the operative language in the 1909 and 1910 Acts, stating what property is reserved to the United States, and it refers only to the solid combustible rock known as coal.

B. Other Provisions Of The Coal Lands Act Verify That The Reservation Of "Coal" Refers Only To The Solid Mineral Fuel, And Not To Gas.

The surrounding provisions of the 1909 and 1910 Acts confirm the plain meaning of the reservation. See *American Fed'n of Musicians* v. *Wittstein*, 379 U.S. 171, 176 (1964). Both the 1909 and 1910 Acts provide patentees "the right to mine coal for use on the land for *domestic purposes* prior to disposal by the United States. . . ." 30 U.S.C. § 81, 85 (emphasis added). When Congress enacted the 1909 and 1910 Acts, coal, the solid rock, was used to heat homes on the lands that had been and would be entered. See, *e.g.*, *Coal Handbook* 306 (Robert A. Mayer ed., 1981) (coal was the dominant residential fuel as late as 1935); 45 Cong. Rec. 6153 (1910) (remarks of Rep. Craig) (lignite coal usable for domestic purposes). Coalbed gas (like natural gas generally) was not captured by settlers for use as a domestic fuel.

Furthermore, both the 1909 and 1910 Acts provide that entrymen could contest Interior's "classification" of lands "valuable" for "coal" and, if successful, secure "a patent without reservation." 30 U.S.C. §§ 81, 85. Those provisions indisputably refer to Interior's classification of lands using criteria pertaining exclusively to solid coal, with which Congress was well familiar. See *Classification*

and Valuation of Coal Lands, 37 Pub. Lands Dec. 653 (1909) (Pet. App. 137a); H.R. Rep. No. 61-377, at 1, 4 (1910); 43 Cong. Rec. 2504 (1909); 45 Cong. Rec. 6040-41 (1910). Interior divided "coal deposits"[14] into four classes based on the rank of solid coal present and its fuel value, determined by using an "air-dried" (that is, *gas-free*) sample. Pet. App. 137a. If the coal met certain criteria of depth and thickness to warrant classification of the land as coal land, it was then valued on the basis of recoverable tonnage and proximity to railroads—factors only of significance for solid coal. Pet. App. 138a-139a. The presence and recoverability of gas in the coal formation played no part in the classification and valuation of coal lands. There is no ambiguity as to what Congress meant by reserving coal; it is the same coal that for a half-century was the basis for identifying the "coal lands" subject to disposal under the Coal Lands Acts of 1864 and 1873. The only mineral reserved in the 1909 and 1910 Acts by Congress, dealing as it was "with a practical subject in a practical way," *Burke*, 234 U.S. at 679, is the solid combustible rock coal.

Because the meaning of the reservation is plain, so too is the meaning of the "patent to the land entered," 30 U.S.C. § 85; see also *id.* § 81. Prior to the enactment of the 1909 and 1910 Acts, as noted above, the "patentee received title to the entire land, including any subsequently discovered minerals." *Western Nuclear*, 462 U.S. at 48 n.9. For a homesteader who did not challenge (or challenge successfully) the classification of the lands as valuable for coal, the 1909 and 1910 Acts altered that

[14] The term "coal deposits," also used periodically in the statutes, does not connote anything different from the term "coal," as both this Court and the Department of Interior have recognized. *See Andrus* v. *Shell Oil Co.*, 446 U.S. 657, 658 n.1 (1980); Pet. App. 166a (noting consistent Interior definition since 1920 of "mineral deposit" as "any natural occurrence of a useful mineral or ore in sufficient extent and degree of concentration to invite exploitation") (internal quotation marks omitted). The Department also determined in 1990 that coalbed methane deposits are "'oil and gas deposits,'" Pet. App. 167a, and thus not coal deposits.

regime only by issuing a patent reserving the "specifically identified mineral[] to the United States": namely, coal. *Id.* at 49. Because the only mineral reserved is coal, the 1909 and 1910 Acts plainly authorize the conveyance to the patentee of the surface and all other minerals, including all gas. 6 *American Law of Mining* § 200.04[4] (2d ed. 1998); 2 *Law of Federal Oil and Gas Leases* § 23.18, at 23-58 (Sept. 1998).[15]

II. THE HISTORICAL CONTEXT AND THE PROGRESSION OF PUBLIC LANDS STATUTES CONFIRM THAT THE 1909 AND 1910 ACTS DID NOT RESERVE ANY GAS TO THE UNITED STATES.

Even if the statutory language were not so straightforward, the history and context of the 1909 and 1910 Acts, and their place in the progression of public lands statutes, verify that Congress only intended to reserve coal (and not gas) to the United States.

A. The Limited Reservation Of Coal Reflects Congressional Efforts To Redress A Crisis In The Supply And Control Of Solid Coal With Minimal Encroachment On Settler Property Rights.

Public land statutes must be interpreted in light of the "'condition of the country when the acts were passed.'" *Leo Sheep*, 440 U.S. at 682 (quoting *Winona & Saint Peter R.R. Co.* v. *Barney*, 113 U.S. 618, 625 (1885)). The national condition prompting the 1909 and 1910 Acts was a crisis in the supply and control of *solid* coal from the fraudulent acquisition by railroads of lands valuable for *solid* coal. The immediate response of the federal government—broad withdrawal of such lands from further entry or patent under the non-mineral land laws—jeopardized the traditional rights of homesteaders and the strong national interest in rapid settlement of the West.

[15] *Western Nuclear*'s determination that the 1909 and 1910 Acts only reserve "specific minerals" is fatal to the Tribe's claim that it is entitled to all minerals and other substances that might be found in the coal stratum, including not only coalbed methane but also subsurface water and carbon dioxide.

The 1909 and 1910 Acts were an attempt by Congress to secure federal control of coal with minimal encroachment on the rights of settlers.

As detailed above, *supra* at 2-7, railroad monopolies had fraudulently acquired vast amounts of coal lands and had engaged in coal price-fixing, thus gaining near "absolute control of all production and transportation and marketing of coal." *Clark Testimony*, at 7; Mayer & Riley, *supra*, at 123-27. In an effort to break that monopoly, Roosevelt withdrew lands classified as (or suspected to be) valuable for coal with the intent of precluding agricultural entry altogether; he intended thereby for the federal government to maintain ownership, leasing the right to work the coal under a royalty system. The government would control the rates charged by common carriers to ship the product as well as the prices charged to consumers. 41 Cong. Rec. 2615; see also *Clark Testimony*, at 9, 15-16; Mayer & Riley, *supra*, at 128-33.

Congress resisted this scheme as too prejudicial to the rights of entrymen and the national interest in settlement of the West, but what is critical to this case is how Congress accommodated those conflicting interests. Congress was not interested simply in preserving the surface for the entryman; it rejected bills that would have severed altogether the surface from a broad range of precious minerals (including gas). See *supra* at 5 n.1. At the turn of the century, republican sentiment ran strong in Congress, particularly among representatives of the West. The notion that the federal government could withhold certain property interests from those who settled the West was unacceptable to many. See, *e.g.*, 43 Cong. Rec. 2505 (1909) (remarks of Rep. Marshall); *id.* at 2507 (remarks of Rep. Gronna); 45 Cong. Rec. 6052 (1910) (remarks of Rep. Craig). The vehemence of those sentiments is reflected in Representative Mondell's observations in 1914, castigating another proposal to reserve the entire mineral estate in the patent: "[T]he monarchical theory is to reserve all minerals to the crown, upon the

theory that the mere subject is not entitled to anything except the soil that he stirs. It is a relic of monarchical government, of peonage, if you please." 51 Cong. Rec. 10,494 (1914).

Congress knew that it had "often happened" that rich mineral deposits had been found in homestead lands "years after the patent ha[d] been issued." *Deffeback*, 115 U.S. at 404-05. Nonetheless, Congress refused in 1909 to depart any more than necessary from the principle that the homesteader had earned all of the land, free and clear, by the five years' labor and risk necessary to secure a patent, cf. Homestead Act § 2, 12 Stat. at 392-93. The broader the reservation, the greater would be the intrusion upon his property by those pursuing mineral wealth with government sanction. "The temptation to such exploration would be according to the suspected extent of the minerals, and being thus subject to indiscriminate invasion, the land would be to one having the title poor and valueless, just in proportion to the supposed richness and abundance of its products." *Davis's Administrator* v. *Weibbold*, 139 U.S. 507, 526 (1891).

"[D]ealing with a practical subject in a practical way," *Burke*, 234 U.S. at 679, Congress resolved these competing interests by encroaching upon the homesteader's title only to meet the precise crisis at hand: namely, by reserving coal, but only in lands deemed valuable for coal. This is illustrated by the comments of Rep. Mondell in defending the 1909 Act that he sponsored. See *Federal Energy Admin.* v. *Algonquin SNG, Inc.*, 426 U.S. 548, 564 (1976) (statements of sponsors "deserve[] to be accorded substantial weight in interpreting the statute"). He explained that the Act "is the first legislation before Congress providing for a limited patent, or a patent reserving the mineral. It is necessary in the opinion of our committee by reason of the conditions that exist." 43 Cong. Rec. 2504 (1909). All federal patents issued under prior laws, Rep. Mondell remarked, "have heretofore been patents in fee," which this Court had held to

convey the rights to all minerals in the land to the patentee. *Id.* The following colloquy then took place:

> Mr. STEPHENS of Texas. Could the gentleman better arrive at what he desires by only patenting the surface of the land and reserving all minerals, precious and otherwise?
>
> Mr. MONDELL. That has been discussed at some length and the Committee on Public Lands is not of the opinion that that ought to be done. We believe this is quite a sufficient departure from the past practice of the Government. The lands which this legislation will affect are lands which the department has claimed contain some coals of value.
>
> Mr. STEPHENS of Texas. Is this not a step in the direction of issuing limited patents?
>
> Mr. MONDELL. It is; and I trust this is as far as we will go in that direction.

Id.

The history of the 1910 Act also confirms that Congress intended only to reserve coal, not gas. On December 15, 1909, Secretary of the Interior Ballinger wrote to Chairman Mondell suggesting that he extend the provisions of his bill "to lands containing oil and *natural gas.*" H.R. Rep. No. 61-377, at 5 (1910) (emphasis added). The Public Lands Committee rejected that suggestion. Then, in debate over the bill, Congressman Stephens of Texas proposed that the federal government should reserve not only coal, but also "other fuels, such as gas and oil." 45 Cong. Rec. 6044 (1910). Mondell rebuffed Stephens' proposal, pointing out that coal can be readily identified by outcroppings, but "[g]as is found here and there. Oil and gas present much greater difficulties, when we propose to separate the surface from the mineral, than coal." *Id.*

Such a clear distinction between gas and coal would not have been drawn without challenge if Congress had intended in the 1909 and 1910 Acts to reserve some gas to the United States. Congress' reservation of coal clearly

was not meant to encompass any gas. Furthermore, it defies common sense to infer that Congress intended to reserve marsh gas—a known hazard and waste product of coal mining with no contemplated commercial value—while it passed to the patentee all noncoal minerals in the land, including *precious* minerals like oil or even gold. See Pet. App. 39a (Tacha, J., dissenting) ("Because a reservation of CBM would go against expectations, that would make it *more*, rather than less, imperative for the government to mention the gas in its reservation of coal").

In summary, Congress, respectful and protective of the traditional rights of homesteaders, reserved only the solid rock fuel coal to the United States, an action required by the conditions of the country at the time to break the "practical monopoly of the production and transportation of what is an absolute necessity of everyday life." *Clark Testimony,* at 16. That description can only apply to solid coal. The "concerns with monopolization and speculation that motivated Congress" to enact the 1909 and 1910 Acts "had nothing to do with" coalbed gas, and it is unreasonable to surmise that such gas (unmentioned in the debates) was included within the reservation. *Utah Div. of State Lands* v. *United States,* 482 U.S. 193, 203 (1987) (rejecting claim by the United States that statutory reservation of reservoir sites, enacted to prevent settler monopolization of those sites, included beds of navigable rivers and lakes, which were not subject to that risk).

B. The Historical Progression Of Public Land Statutes Demonstrates That Congress Did Not Intend To Reserve Gas In The 1909 And 1910 Acts.

The land-grant legislation that followed the 1909 and 1910 Acts reinforces that Congress did not intend to reserve gas when it reserved coal. The progression of these statutes shows that, once it had abandoned the separate treatment of mineral and nonmineral lands, Congress only reserved "specifically identified minerals" until 1916, *Western Nuclear,* 462 U.S. at 49; separately re-

served "gas" when it desired that mineral; and, when it reserved gas, only did so where the land was specifically classified as valuable for gas, belying respondents' claim that in the 1909 and 1910 Acts it reserved all gas wherever associated with coal. Furthermore, when it later addressed minerals found in association with reserved minerals, Congress confirmed that the reservations did not encompass anything but the mineral specifically named.

1. *1912 Act*

In 1912, Congress enacted a statute, applicable only to lands in Utah, that reserved "oil and gas in such lands," but only when Interior had previously classified lands as valuable for those specifically identified minerals. Act of Aug. 24, 1912, ch. 367, 37 Stat. 496. Representative Mann sought to expand the reservation to "oil, coal, or gas," where Interior had classified lands as valuable for oil and gas, but not coal. 48 Cong. Rec. 11,324 (1912). Representative Mondell objected to that proposal, and it was not adopted. *Id.* Congress refused to reserve coal in lands that had not been classified as valuable for coal, even though those lands had been classified as valuable for oil and gas, demonstrating the precision and specificity with which Congress reserved the enumerated minerals and the critical role that Interior's classification played. Congress took the same tack for oil and gas in Utah as it had for coal in the 1909 and 1910 Acts because "[t]he extension of this method of disposal to lands containing mineral deposits *other than coal* is considered logical and desirable." H.R. Rep. No. 62-1155, at 2 (1912) (letter from Acting Secretary of Interior Samuel Adams) (emphasis added); 48 Cong. Rec. 3479 (1912) (remarks of Sen. Smoot). Congressional action on the 1912 Act demonstrates both that Congress once again opted for the narrowest possible departure from the historic practice of granting fee simple absolute patents (by reserving only the specific mineral for which the land was valuable), and that it treated coal separately from oil and gas.

2. *1914 Act.*

In the Act of July 17, 1914, ch. 142, 38 Stat. 509 (codified as amended at 30 U.S.C. §§ 121-123), Congress took a more radical step toward broad mineral reservation by expanding the list of specific minerals for which limited patents would be issued. The 1914 Act provided that "[l]ands withdrawn or classified as phosphate, nitrate, potash, oil, gas, or asphaltic minerals, or which are valuable for those deposits, shall be subject to appropriation, location, selection, entry, or purchase, if otherwise available, under the nonmineral land laws of the United States . . . ." 30 U.S.C. § 121. However, any patent issued for such lands "shall contain a reservation to the United States of the deposits on account of which the lands so patented were withdrawn or classified or reported as valuable. . . ." *Id.* § 122.

In sponsoring this Act, Representative Mondell, as he had done in 1909 and 1910, blocked efforts to (i) reserve all of the minerals under the surface and (ii) reserve all of the minerals specifically identified in the bill if Interior had classified lands as valuable for any one of them. 51 Cong. Rec. 10,493-94 (1914) (remarks of Rep. Mondell). Representative Mondell explained why the bill only reserved the specifically identified mineral that was the basis for Interior's land classification. If Congress were to reserve other minerals in those lands, it "must logically go to the extreme of withholding all minerals," *id.* at 10,493, a step it was unwilling to take at that time. Congress chose instead the same kind of limited reservation it had "heretofore provided for in the case of coal." *Id.*

Significantly, Congress in 1914 focused on lands containing both coal on the one hand and oil and gas on the other. Representative Mondell stated that there would be a reservation of both coal and gas only if there were a "double withdrawal" of the land: *i.e.*, if the land were withdrawn as valuable for coal (which would be reserved under the 1909 and 1910 Acts), and as valuable for oil

and gas (which would be reserved under the bill then pending). 51 Cong. Rec. 10,493 (1914) (Rep. Mondell).

As was true in 1912, Congress' action in the 1914 Act in reserving only specifically identified minerals in lands that Interior had previously classified as valuable for those minerals confirms that Congress only reserved the solid rock coal in 1909 and 1910 in coal lands. Before 1916 Congress did not reserve unknown or unnamed minerals. It reserved only the specifically enumerated mineral and then only on lands that had been classified as valuable for that mineral. Moreover, even though Congress understood that coal and gas frequently occur in the same lands, they were subject to different reservations under different statutes. Gas was reserved only under the 1914 Act in land classified as valuable for that mineral; coal was reserved only under the 1909 and 1910 Acts in land valuable for that mineral. Both coal and gas would be reserved to the United States in a particular tract under the different Acts *only if* Interior has completed a "double withdrawal" of lands as valuable for both.

The 1914 Act demonstrates just how unnatural the Tenth Circuit's reading of the term "coal" is. If coalbed methane were found on 1914 Act lands where "gas" is reserved to the United States without qualification, one would expect it to belong to the federal government, as the Department of Interior expressly found in the 1981 Solicitor's opinion. See Pet. App. 151a-152a. After all, the courts (at the urging of the Department of Interior) and the Department itself have held that the 1914 Act term "gas" is broad enough to encompass even nonhydrocarbon gases like carbon dioxide. See *Aulston* v. *United States*, 915 F.2d 584, 595-96 (10th Cir. 1990); *Robert D. Lanier*, 93 Interior Dec. 66, 73-74 (1986). By the Tenth Circuit's and respondents' labored interpretation of the term "coal," however, a 1914 Act patentee who owns the coal also owns the natural gas in the coal formation despite the overall reservation of gas to the United States; the coalbed gas is not "gas" because it is coal. Such an absurdity, by itself, is sufficient to warrant rejecting the

Tenth Circuit's construction of the Coal Lands Acts. See *Rowland* v. *California Men's Colony*, 506 U.S. 194, 200 (1993).[16]

3. *1916 Act.*

In marked contrast to the 1909 and 1910 Acts, in 1916 Congress enacted the Stock-Raising Homestead Act ("SRHA"), ch. 9, 39 Stat. 862 (1916), 43 U.S.C. § 291 *et seq.*, which reserved to the federal government in the large tracts granted under that Act "the coal and other minerals in the lands," irrespective of whether Interior had previously classified the lands as valuable for any mineral. 43 U.S.C. § 299. The SRHA marked the "culminat[ion]" of the "shift" from reservation of "specifically identified minerals" based on "land classification" to a reservation of coal and all other minerals irrespective of Interior's land classification. *Western Nuclear*, 462 U.S. at 49. For the first time Congress reserved more than a "specifically identified mineral[]." *Id.* Congress' use of the language found in the legislation discussed above "demonstrates that Congress knew how to reserve specific minerals when it chose or to make a broad reservation of minerals when it chose." Pet. App. 126a.[17]

Thus, the 1909 and 1910 Acts must be construed in light of the progress of land-grant legislation. Throughout the nineteenth century, Congress granted the home-

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[16] It was well understood in 1909 that marsh gas—a term often used interchangeably with methane—was a form of natural gas. Daniel D. Donahue, *A Treatise on Petroleum and Natural and Manufactured Gases* 6 (1902) (natural gas "is practically identical with marsh gas, known to miners as fire damp"); I Sir Boverton Redwood, *Petroleum* 246 (2d ed. 1906) ("Natural gas consists . . . principally [of] marsh gas") (emphases omitted).

[17] That ability is also reflected in a 1917 Act applicable to lands Interior had classified as valuable for coal in Indian reservations. 30 U.S.C. §§ 86-88. Rather than adopt the approach it had chosen a year earlier in the SRHA, Congress reverted to the 1909 and 1910 Acts model and reserved "coal" where the lands had previously been classified as valuable for that mineral. *See* 54 Cong. Rec. 3639 (1917) (Rep. Mondell) (describing patent as "a fee title, in which is reserved the body of this one mineral").

steader a fee-simple patent, which included any minerals subsequently discovered. In the 1909 and 1910 Acts, Congress departed from that practice only insofar as necessary to meet a crisis in the control and supply of coal, by granting a patent that reserved coal in coal lands only, not (as the Tenth Circuit held) all "newly appreciated value associated with that mineral." Pet. App. 31a.[18] Congress used the term "coal" in its ordinary usage as the solid combustible rock; when it meant to reserve gas, it used the term "gas," and reserved it only where the land was classified as valuable for gas. When Congress in 1916 decided that the country would be better served simply by severing the entire mineral estate regardless of the classification of the land, it adopted a statute accomplishing that goal in clear and expansive terms. In light of this straightforward approach to mineral reservation, there is no basis for the Tenth Circuit's byzantine analysis of the term "coal" to include natural gas in coal formations.

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[18] As did this Court in *Western Nuclear*, Congress itself has recognized that 1909, 1910, and 1914 Act reservations apply only to the specific named mineral and not to "associated" minerals. In 1933 Congress considered how associated potash and sodium were to be developed in New Mexico if the two were commingled, and the federal government had reserved potash but not sodium under the 1914 Act. Congress treated the two as separate minerals, recognizing that "[w]here patents had been issued which reserved the potash, the owner of the surface is the owner of the sodium. thus creating a dual ownership of the same deposit made up of both potash and sodium." H.R. Rep. No. 72-1938, at 2 (1933); *see also* 30 U.S.C. § 124. In 1955 Congress prohibited federal coal lessees from mining atomic "source material" such as uranium embedded in lignite coal owned by the United States under the 1909 and 1910 Acts. 30 U.S.C. § 541d. Congress recognized that a 1909 or 1910 Act patentee has no title to coal but "has title to any valuable source material contained in lignite occurring in his lands" and "possessed fee simple title to all other minerals in the land, including valuable source materials, *regardless of the host material or the mode of occurrence*." H.R. Rep. No. 84-1478 (1955), *reprinted in* 1955 U.S.C.C.A.N. 2996 (emphasis added).

C. The Coal Reservation Does Not Include Gas If The 1909 And 1910 Acts Are Construed *In Pari Materia* With The Mineral Leasing Act.

Statutes reserving minerals in land patents are to be construed *in pari materia* with the Mineral Leasing Act of 1920 ("MLA"), ch. 85, 41 Stat. 437 (codified at 30 U.S.C. § 182), which provides for the disposition of those minerals. *Kinney-Coastal Oil Co.* v. *Kieffer*, 277 U.S. 488, 504 (1928); cf. 30 U.S.C. § 182 (MLA applies to "all deposits of coal . . . under laws reserving to the United States such deposits").

The MLA's coal provisions from 1920 onwards make sense only in reference to coal, the solid mineral, and are inapplicable to CBM gas. Those provisions originally required payment of royalties on the basis of tonnage, in contrast to MLA gas provisions requiring payment of royalties of "5 *per centum in amount or value* of the production." See 41 Stat. at 439, 440, 442 (emphasis added). Similarly, the MLA's coal leasing provisions addressed mining of the solid coal, whereas its gas provisions required "drill[ing] of one or more wells for gas" and provided for conversion of "any gas or petroleum placer claim" to an oil and gas lease. *Id.* at 439, 441-44. As the Department of Interior held in 1921, relying on the definition of coal as a solid carbonaceous substance: "Congress in the use of the word 'coal' in the leasing act clearly employed it in its generally accepted sense, as meaning a natural product used for fuel and a deposit of the character subject to disposition under the coal-land laws." *Instructions*, 48 Pub. Lands Dec. at 301. Nothing in the MLA indicates that coal is ever dealt with as a gas. Indeed, the MLA, as amended, refers to coal as a "nongaseous hydrocarbon substance[]." 30 U.S.C. § 181. Under both the MLA and the 1909 and 1910 Acts, coal is the solid mineral rock.

In keeping with the plain meaning of the MLA, Department of Interior regulations have long defined coal as the solid rock "of all ranks from lignite through anthracite," 30 C.F.R. §§ 206.251, 700.5; 25 C.F.R. § 211.3.

By contrast, Interior has always defined "gas" as "any fluid, either combustible or noncombustible, hydrocarbon or nonhydrocarbon, which is extracted from a reservoir and which has neither independent shape nor volume, but tends to expand indefinitely. It is a substance that exists in a gaseous or rarefied state under standard temperature and pressure conditions." 30 C.F.R. § 206.151; 25 C.F.R. § 211.3. In the courts, the United States has correctly taken the position that these regulations define the "gas" reserved under the 1914 Act. See *Aulston*, 915 F.2d at 595. Because coalbed gas indisputably fits this definition of gas, it is "gas" reserved under the 1914 Act, and not "coal" reserved under the 1909 and 1910 Acts, as the Solicitor of Interior concluded in 1981. Pet. App. 152a-155a.[19] These regulations, unquestionably deserving of *Chevron* deference in interpreting the MLA, are entitled to the same weight in construing the complementary provisions of the 1909 and 1910 Acts. They show that those Acts reserved the solid rock coal, and not gas of any kind.[20]

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[19] In 1981, the Solicitor of Interior pointed out that the coal leasing provisions of the MLA, 30 U.S.C. § 201, unlike provisions applicable to certain other minerals, *id.* §§ 211, 241(a), 261-262, 281-282, do not provide for recovery of any associated minerals owned by the federal government. Pet. App. 156a-157a. Ever since, Interior has leased rights to coalbed gas under oil and gas leases where it owns gas reserved under the 1914 Act.

[20] Even though the Department of Interior's order retracting the 1981 Solicitor's opinion removed the predicate for *Chevron* deference, that opinion should still be accorded weight in this Court's deliberations under *Skidmore* v. *Swift & Co.*, 323 U.S. 134, 140 (1944) (nonbinding agency opinions "constitute a body of experience . . . to which courts . . . may properly resort for guidance"). *See Bragdon* v. *Abbot*, 118 S. Ct. 2196, 2207 (1998). The 1981 opinion is a thorough review of the 1909 and 1910 Acts, their history, and their place within federal minerals law. It has been relied upon in decisions of courts and the Department, *see, e.g.*, Pet. App. 164a-165a & n.2, and private industry invested billions of dollars in reliance upon it. The current litigating position of the federal respondents does not detract from the force of the 1981 opinion, *see Bowen* v. *Georgetown Univ. Hosp.*, 488 U.S. 204, 212 (1988), the fairness of which is underscored by the opinion's adoption of an interpretation that is against the Government's financial interest. *See Andrus*, 446 U.S. at 672-73 (adopting original position of Interior rather than litigating position by which the Treasury "would be substantially enriched").

D. Congress Did Not Create An Unprecedented And Impractical Split Gas Estate In The 1909 And 1910 Acts.

The Tenth Circuit held that the 1909 and 1910 Acts reserved the "adsorbed CBM" to the United States, Pet. App. 33a, but not the same gas that may have migrated into adjacent noncoal strata, Pet. App. 18a n.8, or any other natural gas in the patented land. Such an unprecedented and unworkable split gas estate cannot be imputed to a Congress "dealing with a practical subject in a practical way." *Burke*, 234 U.S. at 679.[21]

As an initial matter, if Congress had so intended to divide the gas estate, it would not have done so cryptically by a reservation of "coal." Unlike fixed minerals like coal, it was understood that title to gas is not established by subsurface location, *Champlin Refining*, 286 U.S. at 233-34; under the rule of capture, the producer is entitled to all gas that flows through the well bore. *Brown* v. *Spillman*, 155 U.S. 665, 669-70 (1895). Indeed, the common law of mining did not view oil and gas as the same kind of estate as coal.

> Like water, [oil and gas] are not the subject of property except in actual occupancy, and a grant of them passes nothing for which ejectment will lie. The fact that oil and gas cannot, *while in the ground, like*

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[21] The Tenth Circuit placed great emphasis on the fact that Congress reserved all "coal" rather than only coal that had commercial value at the time. Pet. App. 28a-30a. Congress, however, did not reserve all coal on public lands, but only coal on lands classified as valuable for that mineral. Furthermore, its decision not to reserve only workable coal on coal lands shows only that Congress captured all the benefits of solid coal for the public and avoided an unworkable split coal estate that would engender endless disputes between the patentee and the federal coal lessee. It does not suggest that Congress thereby reserved a separate mineral and created an impractical split gas estate.

> *the solid minerals, be the subject of an estate distinct from that in the soil,* is the foundation of the distinction between oil and gas rights and general mineral rights . . . .

1 Daniel M. Barringer & John S. Adams, *The Law of Mines and Mining in the United States* 31 (1897) (emphasis added); *accord* Donahue, *supra,* at 10. Thus, conveyance of oil and gas (unlike conveyance of fixed minerals) was understood to give no more than "the exclusive right to reduce to possession the deposits of natural gas and oil found beneath the surface of [the] land." *Ohio Oil Co.* v. *Indiana (No. 1),* 177 U.S. 190, 209 (1900); Donahue, *supra,* at 13. It cannot be presumed that Congress, by the use of the single, everyday word "coal," intended to reserve two mineral interests of a distinct nature, extracted by different means, and treated differently in the law.

This is especially so if the Acts are given the practical construction required by *Burke.* Coal seams are often interfingered with many layers of noncoal rock within a small area. See Mavor, *supra,* J.A. Vol. 1, at 233; Simon & Hopkins, *supra,* at 20-23. Often there is "methane in the rock above or below the coal," Jed H. Mosgrove, *Mine Gases, in Elements of Practical Coal Mining* 253, 264 (Douglas F. Crickmer & David A. Zeeger eds., 2d ed. 1981) and it can be difficult to complete a well only in the coal seam. Furthermore, a single well bore is often used to produce natural gas from multiple gas-bearing subsurface horizons (both coal and noncoal). There are no chemical markers to distinguish adsorbed CBM from the same gas that flows through the well bore from noncoal strata. As the Department of Interior recognized in 1990, "[w]here . . . the coal may be interbedded with other gas-bearing strata, it could be unusually difficult to seal off the coal or to account separately for gas produced from the coal and non-coal strata." Pet. App. 169a n.6. That is true today, and was certainly true in 1909; it cannot be inferred that a Congress protective of landowner rights intended two sets of wells and gathering facilities to be placed on a patentee's property, one to tap coalbeds and another to tap noncoal reservoirs. Congress simply would not have created the unworkable split gas estate concocted by the court of appeals. The only practical interpretation of the 1909 and 1910 Acts is that the reservation of "coal" referred solely to the solid rock fuel commonly known by that name.

III. THE CANON THAT AMBIGUITY IN LAND GRANTS IS RESOLVED IN FAVOR OF THE SOVEREIGN DID NOT ENTITLE THE TENTH CIRCUIT TO DISREGARD THE PLAIN MEANING OF THE STATUTES.

A. The 1909 And 1910 Acts Are Not Ambiguous Because They Fail To Define The Term "Coal" Or Mention Coalbed Gas.

Despite the clarity of the language and history of the 1909 and 1910 Acts, the court of appeals nonetheless reached a contrary result by breaching the most fundamental tenets of statutory construction.

The court started not with the plain language of the statute, but with the canon that "any ambiguity or uncertainty in the terms employed [in a land grant] should be resolved in favor of the Government," *Burke,* 234 U.S. at 680. At the outset, before analyzing the statutory text, the Tenth Circuit declared that canon to be "[o]f critical importance" to this case, and placed "[t]he burden . . . on defendants to dispel any ambiguity in the construction of the coal reservation." Pet. App. 10a-11a. Aside from the fact that no party bears the burden of proof in interpreting statutes, this Court has admonished that rules for resolving statutory ambiguity "come[] into operation at the end of the process of construing what Congress has expressed, not at the beginning as an overriding consideration." *Chapman* v. *United States,* 500 U.S. 453, 463 (1991) (rule of lenity); *Chevron,* 467 U.S. at 842-43 & n.9 (agency deference). Cf. *Western Nuclear,* 462 U.S. at 59-60 (invoking canon at the end of statutory analysis).

Moreover, as this Court stated just last Term, discussing the rule of lenity: "The simple existence of some statutory ambiguity . . . is not sufficient to warrant application of that rule, for most statutes are ambiguous to some degree." *Muscarello* v. *United States*, 118 S. Ct. 1911, 1919 (1998). Tiebreaking presumptions are only invoked "if, after seizing everything from which aid can be derived, we can make no more than a guess as to what Congress intended." *Id.* (quotation marks omitted). This Court has consistently emphasized this same principle in land-grant cases, declaring that "the well-settled rule of this court that public grants are construed strictly against the grantees" does not mean that such grants are "to be so construed as to defeat the intent of the legislature, or to withhold what is given either expressly or by necessary or fair implication . . . ." *Leo Sheep*, 440 U.S. at 682-83 (internal quotation marks omitted). Here, the fair implication of the statute can only be derived by beginning first with the language and traditional tools of statutory construction, applied with the recognition that "the policy of the Federal Government in favor of settlers upon public lands has been liberal." *Northern Pac. R.R. Co.* v. *Amacker*, 175 U.S. 564, 567 (1900) (internal quotation marks omitted).[22]

The court of appeals aggravated its error by refusing to give the term "coal" its plain meaning, reasoning that because the "1909 and 1910 Acts neither define nor mention CBM[,] . . . the statutes do not by their plain language indicate congressional intent regarding CBM." Pet. App. 14a. But the absence of any definition addressing CBM does not entitle a court to disregard the plain meaning of the term "coal." Quite the contrary, "[w]hen a word is not defined by statute, we normally construe it in accord with its ordinary or natural meaning." *Smith* v. *United States*, 508 U.S. 223, 228 (1993). As Judge

[22] *See also United States* v. *Northern Pac. Ry. Co.*, 311 U.S. 317, 361 (1940) (discussing "liberal construction" of homestead laws); *Ard* v. *Brandon*, 156 U.S. 537, 543 (1895) ("The law deals tenderly with one who, in good faith, goes upon the public lands with view to making a home thereon").

Tacha aptly put it in dissent, "[s]ilence does not equate with ambiguity." Pet. App. 40a.

B. The Court Of Appeals Erred In Determining That "Coal" Was An Ambiguous Word In 1909.

Although the meaning of "coal" is clear as day, the Tenth Circuit purported to find ambiguity based on discussions of the chemical composition of coal in certain contemporary texts. This type of scientific inquiry is inappropriate under *Burke*, 234 U.S. at 679, but, in any event, the Tenth Circuit badly misread these texts in its pursuit of statutory ambiguity.

First, the court of appeals cited a dictionary definition of coal as an " 'amorphous' " substance containing " 'hydrocarbons,' " which the court construed as a reference to methane in coal. Pet. App. 16a (citing *Funk & Wagnalls New Standard Dictionary of the English Language* 508 (1913)). But that very dictionary defines "amorphous" as lack of a crystalline structure, *Funk & Wagnalls* at 94, which is a characteristic of solid coal. Stach, *supra*, at 87. Moreover, solid coals are composed of many different hydrocarbons. *Coal Handbook*, *supra*, at 11. There is no basis for the court's suggestion that a reference to "hydrocarbons" in "amorphous" coal is a reference to methane gas. Certainly the author of that entry did not understand coal to include gas; the next sentence (omitted by the Tenth Circuit) describes coal as "brittle, compact, massive, and sometimes laminated . . . ." *Funk & Wagnalls* at 508.

Second, the court found significant that coal was said to have a " 'variable composition' " that cannot be so readily defined as crystallized mineral rock. Pet. App. 17a. But this is a well-known point of distinction between the *organic rock* coal (composed of macerals of different origin and chemical and physical properties) and *inorganic rock*. Stach, *supra*, at 87. It has absolutely nothing to do with gas.

Third, the court relied upon a statement that marsh gas is "present in considerable quantity in coal, in a dissolved or occluded state. . . ." VI *Encyclopedia Britannica* 575

(1910). Something "present in" coal is not part of the coal itself.

Fourth, the Tenth Circuit placed heavy reliance on an 1873 text characterizing " 'coal' as 'embrac[ing] all classes of mineral fuel that will ignite and burn with flame or incandescent heat,' " and " 'ranging through all the grades of coal, from the hard, dense anthracite to the asphaltic varieties, and from the solidified petroleum to the gaseous naphtha.' " Pet. App. 17a (citing IV *American Cyclopaedia* 726 (Ripley and Dana eds., 1873)). This archaic definition of "coal" as including all mineral fuels no longer prevailed by 1909. See VI *Encyclopedia Britannica* 575 (1910). Not surprisingly this description of coal—which is broad enough to encompass even oil and gas—was omitted from the entry in the *1883* version of the same encyclopedia on which the Tenth Circuit relied; the more recent edition properly defines coal as "a black, opaque, inflammable substance, generally hard and compact." IV *American Cyclopaedia* 726 (Ripley and Dana eds., 1883). Certainly neither Congress nor the Department of Interior used the term "coal" to refer to all mineral fuels in 1909.[23]

Finally, the Tenth Circuit relied on the same 1873 source's statement that in bituminous coal " 'hydrogen is the predominating element, in its [coal's] gaseous or volatile constituents, though both oxygen and hydrogen are generally present in such coals in nearly equal parts.' " Pet. App. 17a (quoting IV *American Cyclopaedia* at

[23] Even in the nineteenth century, Congress expressly recognized the distinction between coal and the mineral fuel petroleum by clarifying that the latter was subject to the Mining Law of 1872, which was inapplicable to coal. Act of February 11, 1897, ch. 216, 29 Stat. 526; *Union Oil*, 249 U.S. at 346. As noted previously, just prior to 1909 Congress also specifically rejected bills that would reserve not only coal but also the distinct minerals oil, gas, and asphalt. *See supra* at 5 & n.1. Interior also had long distinguished between, for example, petroleum and coal. *Union Oil Co. (On Review)*, 25 Pub. Lands Dec. 351 (1897); *see also* II Department of Interior, *Mineral Resources of the United States, Calendar Year 1908* 5, 17, 345 (1909) (distinguishing coal from other mineral fuels).

726). The Tenth Circuit failed to grasp that this discussion is about the respective proportion of hydrogen and oxygen in the different kinds of *solid* coal (*i.e.*, bituminous caking coal has slightly more hydrogen than oxygen in its elemental composition, though the proportions are almost equal, whereas subbituminous block or cannel coal is more oxygenated). IV *American Cyclopaedia* at 726 & table on 727. Hydrogen and oxygen (which after all are gases in standard atmospheric conditions) are "gaseous and volatile constituents" in the sense that they are matter in the solid coal that will be released as a gas when solid coal is burned. See VI *Encyclopedia Brittanica* 575-76 (1910). This discussion likewise has nothing to do with natural gas in coalbeds.

Thus, the Tenth Circuit's analysis of the chemistry of coal was not only inappropriate under *Burke*, but wrong. Coalbed gas was not, and is not, commonly considered to be a constituent of coal. No ambiguity whatsoever exists in the statutory reservations, much less a " 'grievous ambiguity,' " *Muscarello*, 118 S. Ct. at 1919, that would justify application of the rule that ambiguous public grants are construed against the grantee. Congress reserved only the solid rock coal in the 1909 and 1910 Acts.

C. The Tenth Circuit's Analysis Of The Nature Of Coalbed Methane And Damage To Coal From Its Extraction Is Irrelevant And Wrong.

Because "coal" is not an ambiguous word, and does not connote gas, the other considerations raised by the Tenth Circuit are legally irrelevant. They are also unpersuasive.

As an initial matter, the Tenth Circuit's approach is passing strange. Rather than analyze what Congress actually meant by "coal," it engages in speculation as to how Congress would have treated coalbed gas had it given it some thought. See Pet. App. 19a-20a ("it seems to us quite unlikely that Congress, if it had considered the matter," would have severed coalbed gas). This kind of conjecture is far short of "evidence that Members of

Congress actually understood" the reservation of coal to include coalbed gas. *Utah Div. of State Lands*, 482 U.S. at 207; *Amoco Prod. Co.* v. *Village of Gambell*, 480 U.S. 531, 548 (1987) ("Although language seldom attains the precision of a mathematical symbol, where an expression is capable of precise definition, we will give effect to that meaning absent strong evidence that Congress *actually intended* another meaning.") (emphasis added).

In any event, nothing in the Tenth Circuit's analysis justifies the inference that Congress intended the term "coal" to encompass coalbed gas. The court of appeals focused first on the "physical state [of coalbed gas] prior to extraction," Pet. App. 19a, claiming baldly that "there was enough undisputed information about the unique nature of CBM" that Congress would have distinguished it from other natural gases. Pet. App. 17a-18a. Not only is this scientific speculation immaterial under *Burke* because it does not shed light on the ordinary meaning of "coal," but it is also dubious in its own right. Even scientists of the time recognized that "little is known as to the condition of [methane] gas in the coal," Horace C. Porter & F. K. Ovitz, *The Escape of Gas From Coal* 3 (Bureau of Mines Technical Paper 2, 1911) (J.A. Vol. 2, at 510); Rollin T. Chamberlin, *Notes on Explosive Mine Gases and Dust* 16-17 (U.S.G.S. Bulletin 383, 1909) (J.A. Vol. 2, at 433-34) (discussing three "hypotheses" on possible conditions of gas in coal). With the benefit of modern science, the Solicitor of Interior in a 1990 opinion concluded that the state of coalbed methane *in situ* does not differentiate it from other natural gases, Pet. App. 165a, and there is no basis for surmising that anyone would have thought differently in 1909. Indeed, as discussed earlier, *supra* at 12-13, coalbed gas is no different from any other natural gas; it is the same at the burner tip for the consumer, and there is nothing unique about its generation or storage. Besides, it is fanciful to impute to Members of Congress views on an esoteric scientific subject that was never discussed in the 1909 or 1910 Act debates, or to speculate

further that a practical-minded Congress interested in mineral development would have distinguished coalbed gas from other natural gas based on its understanding of the "sorption" process.

The Tenth Circuit also found it unlikely that Congress would have reserved coal without coalbed gas because allegedly such gas could only be extracted in 1909 by crushing or heating coal. Pet. App. 20a & n.13. According to the Tenth Circuit, "in 1909 there appears to have been no technology by which a patent holder could extract and capture CBM from coal without damaging or destroying coal," Pet. App. 20a-21a, and "without bringing large volumes of coal to the surface." Pet. App. 20a n.13. This is just false. First, the Tenth Circuit has confused extraction of natural gas from coalbeds with scientific experiments involving crushing mined coal samples, see Chamberlin, *supra*, J.A. Vol. 2 at 433-34, and with the manufacture of gas by burning solid mined coal (a process known as gasification of coal), see Pet. App. 20a & n.13 (citing Larry L. Anderson & David A. Tillman, *Synthetic Fuels from Coal* (1979)). Second, although various techniques have been developed to enhance the productivity of wells, coalbed gas can be extracted simply by drilling into the coalbed and relieving subsurface pressure. Indeed, the most famous coalbed methane well in the Fruitland Formation, completed in 1953, was an open-hole well dug with no stimulation of the coalbed, Pet. App. 169a n.6; Fassett, *supra*, at 142, an age-old conventional practice prevalent in 1909. It was possible then, as it is now, to "extract CBM while leaving most of the coal relatively undisturbed." Pet. App. 20a n.13.

Regardless, any concern about damage to coal has no bearing on title. Damage to one estate from the extraction of a mineral owned by another is endemic to split estates. Because such estates were common on private lands, the law of split mineral estates was well settled by the time Congress enacted the 1909 and 1910 Acts. See *Chartiers Block Coal Co.* v. *Mellon*, 25 A. 597, 599 (Pa. 1893) (oil and gas owner entitled to drill through coal

owned by another); 2 Curtis H. Lindley, *Treatise on American Law Relating to Mines and Mineral Lands* § 827 (Arno Press 1972) (2d ed. 1903). That law, known as the accommodation doctrine, provides for reasonable reciprocity—the owner of one mineral may make reasonable use of other minerals to extract his own, and he in turn must allow reasonable use of his estate by his counterpart. See, *e.g.*, *Chartiers*, 25 A. at 599; 6 *American Law of Mining* § 200.04[1], at 200-20 (2d ed. 1998). Unreasonable use of another's estate subjects the wrongdoer to legal liability, both in equity and in law. *Id.* at 200-23.

Indeed, at the time it was common for owners of oil and gas rights to drill through another's coal to reach deposits under the coal seam. See George S. Rice et al., *Oil & Gas Wells Through Workable Coal Beds* 5 (Bureau of Mines Bulletin 65, 1913). Such drilling inherently causes damage to the coal. For example, a pillar of coal had to be left around the well to support it; leakage from a gas well could cause hazards for coal miners, including explosions; and drilling might cause surface water to flood into the mines. See *id.* at 5, 9, 11-12, 24-31. The possibility of damage did not mean that the gas and coal estates were inseverable. The accommodation doctrine forces parties to work out consensual solutions or face the prospect of damages for unreasonable exercise of their rights. Coal owners could also seek equitable protection in advance. See *Monongahela River Consol. Coal & Coke Co.* v. *Greensboro Gas Co.*, 38 Pa. C. 151, 156-57 (1910) (requiring driller to cement casings along the well bore to prevent leakage from gas well into the coal). Regulation also can protect the respective estates; for example, Department of Interior regulations and oversight currently preclude unreasonable damage to the coal estate or coal operations from oil and gas drilling. Pet. App. 176a-177a; see also Rice, *supra*, at 38-90 (detailing 1913 conference of state regulators and mining interests convened by the Bureau of Mines to develop uniform state laws for accommodation of the two estates).

No greater commercial damage is done by drilling a well to a target within, rather than underneath, the coal formation; indeed, coal owners often profit from CBM extraction, because it saves them the cost of ventilating the mine. Mavor, *supra*, J.A. Vol. 1, at 222-24; Memorandum to John R. Kunz from William P. Diamond, Department of Interior Geologist (Jan. 13, 1993) (District Court Docket Entry 623; Amoco Summary Judgment Appendix Vol. II, Exh. 136). Had Congress considered the issue of extraction, there is every reason to believe that it would have deemed the accommodation doctrine adequate to protect the rights of both estates.[24]

But the fact of the matter is that none of the considerations identified by the Tenth Circuit informed Congress' judgment in 1909. That does not mean that the Coal Lands Acts are ambiguous with respect to ownership of coalbed gas. Congress reserved only the solid rock "coal," and plainly intended to convey all other minerals to the patentee, in keeping with the rule that "title once passed was free from all conditions of subsequent discoveries of mineral." *Shaw* v. *Kellogg*, 170 U.S. 312, 332-33 (1898).

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[24] The Tenth Circuit discounted the accommodation doctrine of *Chartiers* by invoking a later Pennsylvania case, *United States Steel Corp.* v. *Hoge*, 468 A.2d 1380 (Pa. 1983), which construed a grant of coal to convey coalbed gas. But that case, as the Department of Interior has acknowledged, is based on idiosyncracies: namely, Pennsylvania's geology and its "stratum" theory of minerals ownership. Pet. App. 169a-171a. The "stratum theory" of ownership is inconsistent with the federal regime where Congress reserved specific minerals between 1909 and 1916. *Western Nuclear*, 462 U.S. at 49. *Hoge* and the other cases relied on by the Tenth Circuit turn on state law and the language and rules of construction of private deeds, and have no bearing on the meaning of Congress' reservation of "coal" in the 1909 and 1910 Acts (as even the panel below admitted). Pet. App. 76a n.17. *See, e.g., Rayburn* v. *USX Corp.*, No. Civ. A 85-G-2661-W, 1987 Westlaw 470907, at *3 (N.D. Ala. July 28, 1987) (reservation of gas did not reserve CBM where coal seams were required to be "encased and grouted off"). *But cf. Carbon County* v. *Union Reserve Coal Co.*, 898 P.2d 680, 687 (Mont. 1995) (coalbed gas is gas, not coal).

Coalbed gas is an unreserved mineral that, like all natural gas, belongs to the patentee.

CONCLUSION

The judgment of the court of appeals should be reversed.

Respectfully submitted,

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ADDENDA

ADDENDUM A

NAMED PETITIONER CLASS MEMBERS

Amoco Production Company; Shirley K. Adams; Henry Ashworth; Carla M. Aspaas; Eric K. Aspaas; Helen Ruth Aspaas; Laura Belle Aspaas; Leta M. Adkins; Rita M. Adkins; Maxwell C. Anderson; Earl A. Barker; Maurice C. Breen, named as: Heirs of Maurice C. Breen, deceased; Horace F. Buchanan, named as: the Heirs of Horace Buchanan, deceased; George A. Bugg; Carbone Investment Company; Jack Carmack; Rowland Carmack; Joseph C. Ciancio; William Kemp Clark; Colorado National Bank, George Veto Trust; Colorado National Bank of Longmont, conservator Gladys N. Frazzini; Dorthy A. Corgin; Kelly Cox, named as: the Heirs of Kelly Cox, deceased; A.B. Crosby; Barbara Crosby; David Crosby; John Crow, Jr.; Margaret Crow; Manuel Cruz; Louis M. Cummins; Frederick E. Dickerson; J. M. Eakes; Robert McFerran Eakes; Margaret Ellison; Sally M. Etterbeck; Minnie Flaks; Tillie Flaks; Cassio Frazzini; Adele Frost; Robert Galbasin; Abel S. Gallegos; Montey Garnand; Ruby Gibbs Goggans; Christine Hamilton; Hardin Simmons University; H.A. Harmon, named as: the Heirs of H.A. Harmon, deceased; Katherine Frances McElvain Harvey; the shareholders of Hondo Oil & Gas Company (dissolved); Hyde Oil And Gas Corporation; Charles Kettering; Fidel Lucero; Richard C. Malcomb; Suzanne Heath Manges; Catherine B. McElvain; Mabel McElvain; Thornton H. McElvain, Jr.; Dorothy N. McKelvey; Edwin L. McKelvey; R. Franklin McKelvey; W. R. McMahon; McMurry Oil Company; W. Clay Meredith Charitable Trust; W.A. Moncrief, named as: the Heirs of W.A. Moncrief, deceased; Roy E. Montgomery, personal representative for the Estate of W. Clay Meredith, deceased; Forrest D. Miller, named as: the Heirs of Forrest D. Miller, deceased; Helen L. Miller, named as: the Heirs of

Helen L. Miller, deceased; Thomas S. Morrissey; Thomas J. Morrissey; Emil Mosbacher; Emil Mosbacher III; John David Mosbacher; R. Bruce Mosbacher; Myra Theresa Moulds; North Central Oil Corporation; H.L. Oliver; Clara Onofrio; Margaret C. Pargin; Harold F. Payne, Jr.; Neville G. Penrose; Ben M. Peterson, Jr.; Frederick Petrocco; Phillips Petroleum Company; James M. Raymond; W. E. Rennie, named as: the Heirs of W. E. Rennie, deceased; Thomas C. Romolo; Benton E. Smullyen; Clinton I. Smullyen; William Stirling; J. L. Tatum, named as: the Heirs of J.L. Tatum, deceased; Anna Carleo Tomeo; Ernest Tomeo; Turner Securities; Richard W. Turner, Sr.; George C. Vance, named as: the Heirs of George C. Vance, deceased; Anthony H. Veto; Joseph F. Ware, Jr.; Albert E. Zarlengo; John Doe and all other unknown persons claiming an interest in the mineral estate located within the N/2 of section 12, T33N, R8W, N.M.P.M., La Plata County, Colorado; Amax Oil & Gas, Inc.; Bowen/Edwards Associates, Inc.; Fuel Resources Development Company; Mobil Oil Corporation; National Cooperative Refinery Association; Northwest Pipeline Corporation; Palo/Eagle Joint Ventures; Richmond Petroleum, Inc.; Williams Production Company; John Doe Oil Company and all other unknown persons or entities claiming leasehold working interests or operating rights to explore for, produce or develop coalbed methane or coal constituents from coal or coal strata reserved by the United States in patents issued under the Act of March 3, 1909, or the Act of June 22, 1910, for lands located within the exterior boundaries of the Southern Ute Indian Reservation, and which entities have not obtained tribal consent to and federal approval of said exploration, production or development activities; Class of Defendants situated similarly to those named non-governmental defendants who claim ownership of an interest in coalbed

methane and other coal constituents or claim the right to explore for, develop or produce those substances from coal or coal strata reserved by the United States in patents issued under the Act of March 3, 1909, or the Act of June 22, 1910, for lands located within the exterior boundaries of the Southern Ute Indian Reservation and which class members have not obtained tribal consent to and federal approval of said interests of rights; Jack Balle; J.M. Huber Corporation, Oil & Gas Division; Mary Jean Balle; Donald C. Ciancio; Susie M. Ciancio; NCNB Texas National Bank, as trustee of the Kelly Cox Testamentary Trust; Addie G. Crosby; Jack W. Crosland, Jr.; Henry L. Enochson; Mary Jane Enochson; J.L. Goggans; Liberty Tulsa, as trustee of the Christine J. Hamilton Trust; Helen Crosland Hendricks; Thomas L. Johnstone; James Eric Kaindl; Larry James Kaindl; Lisa Jean Kaindl; Jane P. Mosbacher, named as: the Heirs of Jane P. Mosbacher, deceased; PM Associates, a Colorado general partnership; First Interstate Bank of Denver, as Co-trustee of the Estate of W.E. Rennie est W.E. Rennie; Roderick L. Turner; Wells Fargo Bank, as trustee of the George C. Vance Trust; Albert E. Zarlengo, Jr., as trustee for the Albert E. Zarlengo Trust; J. Magness, Inc.; Mosbacher U.S.A., Inc.; Land Owners Coalseam Committee.

ADDENDUM B

RECORD CITATIONS TO EXCERPTS FROM CERTAIN PUBLISHED MATERIALS CITED IN THIS BRIEF

IV *American Cyclopaedia* (1873)
Court of Appeals Docket Entry 1/19/98 [1097738], Tribe's Supplemental Brief: Rehearing En Banc, Tab 7

IV *American Cyclopaedia* (1883)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab A

American Dictionary of the English Language (1889)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab A

II *Century Dictionary and Cyclopedia* (1906-09)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab C

III *Century Dictionary and Cyclopedia* (1906-09)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab C

V *Century Dictionary and Cyclopedia* (1906-09)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab C

VI *Encyclopedia Britannica* (1910)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab E

Funk & Wagnalls New Standard Dictionary of the English Language (1913)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab F

II *New English Dictionary On Historical Principles* (1893)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab N

IV *New English Dictionary On Historical Principles* (1901)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab N

VI *New English Dictionary On Historical Principles* (1908)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab N

The Universal Encyclopaedic Dictionary (1905)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab U

Webster's Third New International Dictionary (1986)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab W

William A. Barr, *A Catechism on the Combustion of Coal and the Prevention of Smoke* (1901)
Court of Appeals Docket Entry 1/19/98 [1097738], Tribe's Supplemental Brief Rehearing En Banc, Tab 7

Rollin T. Chamberlin, *Notes on Explosive Mine Gases and Dust* (U.S.G.S. Bulletin 383, 1909)
Court of Appeals Docket Entry 3/28/95 [843705], Appellants' Appendix Vol. Five, at 929.

Department of the Interior, *A Dictionary of Mining, Mineral, and Related Terms* (1968)
Court of Appeals Docket Entry 2/5/98 [1104928], Defendant Class' Response Brief in the En Banc Proceeding, Tab D

Horace C. Porter & F.K. Ovitz, *The Escape of Gas From Coal* (Bureau of Mines Technical Paper 2, 1911)
Court of Appeals Docket Entry 3/28/95 [843705], Appellants' Appendix Vol. Eight, at 1789.

George S. Rice et al., *Oil & Gas Wells Through Workable Coal Beds* (Bureau of Mines Bulletin 65, 1913)
Court of Appeals Docket Entry 3/28/95 [843705], Appellants' Appendix Vol. Six, at 1144.